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To

CATHERINE

ALICE

JOHN

FOREWORD

This fourth edition of my *Child Psychology* is being published almost on the twenty-first birthday of the first edition. It is quite an old character as books in this field go, but now that the struggle of revising it is over I am glad I can say it has become virtually a new book. I have again treated the objective and behavioral aspects of human development as thoroughly as feasible, but I have given much more attention than before to the personal and subjective aspects of the child's life. In each of the earlier versions I took a new step in this direction but now I have taken a full leap in emphasizing the concept of the self as an essential consideration in the study of all features and phases of developmental psychology.

The task of writing a book dealing with both the internal and the external dimensions of a child's world is not easy. There is, it is true, a great wealth of material an author can use, but much of it derives from two somewhat separate approaches to the study of human beings. The psychology of the self has a distinguished tradition going back into ancient times, and the concept of the self is now being emphasized in the branches of psychology and psychiatry most intimately concerned with man's personal life. In child psychology there is also a distinguished tradition of research dealing with children's abilities and characteristics and the structural and behavioral aspects of their development as seen from an objective point of view. To get a complete picture it is necessary to utilize both of these lines of inquiry, but most of the available writings are based mainly on one or the other approach, not both. One result is that there are gaps in the picture, and parts can be supplied only by conjecture.

In this edition I have kept much of the topical arrangement of the earlier ones, with the addition of new chapters and with a change in the emphasis given to various topics. The most extensive rewriting

has been done at the beginning and at the end. In the early chapters I have given more space than previously to basic principles, including what I have called a philosophy of growth, and a discussion of the psychological currents in the world into which the child is born. I also introduce certain themes that are later developed in varying contexts throughout the rest of the book. One of these themes concerns the nature of the process by which one can come to know children through a study of child psychology. It is possible to study a child as an object out there in space, viewing him as a mechanism nicely geared for the production of conditioned responses. If our purpose is scientific prediction, manipulation, and control of his overt behavior this will be the view of him we want. We need something more, however, if we wish to know him as a fellow human being whose experience of his own existence is as important to him as ours is to us. To gain insight into what the child's experience may mean to him we must be prepared to inquire what such experiences have meant to us. Awareness of our own experience is necessary in order to perceive or surmise what another's experience might be. Our understanding of a child can go no deeper than our understanding of ourselves, especially when we endeavor to study his emotional life.

In the last chapter I discuss experimental, clinical, and theoretical contributions that show the important practical relationship between self-understanding, understanding of others, and the process of helping children to discover themselves.

There also are some major changes in the middle of the book, notably in the treatment of affection, hostility, anxiety, prejudice, the interplay of feeling and thinking, and the place of compassion in the development of emotional maturity.

In this edition as in earlier ones I have been exceptionally fortunate in the help and encouragement I have received. My wife once again has made it possible to go through the labor of writing a book by aiding with her insight and encouraging me to venture into many of the lines of thought that run through the volume. My children have likewise helped greatly. They and their friends, with whom I associate from day to day, hold out to me more wisdom than I have the capacity to absorb. I continually learn much from them, but they

also baffle and perplex me and remind me of the limitations of my knowledge.

I have received important help from my colleagues in developmental psychology. Dr. Millie Almy read the manuscript and gave valuable advice on major points of emphasis and detail, especially in connection with the sections that are new. I am indebted to Dr. Anne McKillop, who is a rich source of good ideas and good will; to Dr. Ruth Cunningham for helping me to explore theoretical and practical issues in developmental psychology; to Miss Ann Walsh for her counsel; and to Miss Leah Ann Green, Professor Ethel Feagley, Mrs. Frances K. Hurley, and Miss Clara Derring for bibliographic help. I am also grateful to Dr. Antonia Wenkart, especially for help in exploring the meaning of self-acceptance.

In addition, I wish to convey my thanks to Mr. Edgar P. Thomas and his associates at Prentice-Hall, who once again have shown a fine spirit of cooperation.

My profound gratitude goes to my secretary, Miss Andrea Eomme, who cheerfully shepherded the book from scribble to completion, bringing to the task all the resources that go with a fine mind and a good heart.

A. T. J.

CONTENTS

CHAPTER PAGE

1. A Child Is Born 1

Stages in the Birth of a Personality, 2. Ancestral Roots, 2. The Passive Phase, 3. Beginnings of the Active Phase, 3. Knowledge of Early Childhood as Related to Knowledge of Self and of Others, 4. The First Great Hurdle, 7. The World Surrounding the Newborn Child, 9. Psychology of Pregnancy and Childbirth, 11. Two Approaches to the Understanding of Children, 14.

2. Nature and Course of Human Growth 22

Considerations in a Philosophy of Growth, 22. Dimensions of Growth, 30. Heredity and Environment, 30. The Norm, 31. Dilemmas in Development, 31. The Paradox of the Self, 32. The Meaning of Maturity, 33. Development as a Product of Learning and Growth, 33. Other Principles of Development, 42.

3. Beginnings of Behavior and Personal Experience 47

Behavior Before Birth, 47. Activity Before Birth, 49. Behavior at Birth, 52. The Emotions of the Newborn Child, 58. Other Functions, 67. Differences in Degree of Maturity at Birth, 68. Early Signs of Individuality, 72. Learning During the First Days and Weeks of Life, 73.

4. Aspects of Living and Learning in Infancy . . . 79

Psychological Meanings of Physical Care, 79. Discipline, 88. Everyday Activities and Everyday Care, 99. Feeding and Behavior Associated with Feeding, 100. Sleeping, 124. Elimination, 132. Early Phases of Sexual Development, 142.

5. Motor Development 147

Trends in Physical Growth, 148. Locomotion, 148. Use of Arms, Hands, and Fingers, 152. Developmental Changes in Interest and Attitude with Reference to a Motor Performance, 154. Later Features of Motor Development, 155. Motor and Artistic Activities, 162. Interrelations in Motor Development, 164. Relation of Physical and Mental Ability, 165. Motor Performance and Socioeconomic Status, 167. Motor Performance as a Personality Manifestation, 168. Handedness, 170.

CHAPTER PAGE

6. SELFHOOD AND SOCIAL RELATIONSHIPS 177

Self and Society, 178. Social Origins of the Self, 182.

7. DEVELOPMENT OF SOCIAL BEHAVIOR (I) 187

Early Social Responses, 187. Response to Other Children, 191. Group Activities During Preschool Years, 192. Later Trends in Group Behavior, 193. Early Social Relationships and the Process of Self-Discovery, 195. Social Perception, 195. "Natural" and Acquired Aspects of Social Behavior, 198. Resistant Behavior, 199. Children's Fights and Quarrels, 205. Sympathy, 216. Competition and Cooperation, 221. Cooperation, 230. The Role of Association with Peers in the Process of Self-Development, 231. Adults as Peers, 232.

8. DEVELOPMENT OF SOCIAL BEHAVIOR (II) 236

Children's Friendships, 236. Factors in Friendship and Choices of Companions Among Older Children, 238. Social Acceptance, 240. The Bearing of Childhood Relations with Peers on Earlier and Later Attitudes Toward Self and Others, 252. Leadership, 254. The Desire to Belong, 257. Boy-Girl Relationships, 261. The Impact of Adult Social Stratification on the Child, 267. Effects of Nursery-School Experience, 273. Influence of Skills on Social Behavior and Adjustment, 280. Influence of Adult Direction and Management, 283. Prejudice, 287.

9. EMOTIONAL DEVELOPMENT, PART I: AFFECTION, JOY, HUMOR, SEX 299

Early Emotional Reactions, 300. The Role of Needs, Drives, Motives, Goals, 300. Concealment and Suppression of Feeling, 303. Developmental Changes in Susceptibility to Emotion, 305. Affection, 306. Pleasure and Boredom in Childhood, 316. Sympathy, 322. Compassion, 323. Laughter and Humor, 325. Emotional Ramifications of Sexual Development, 328. Other Emotional Aspects of Parent-Child Relationships, 337.

10. EMOTIONAL DEVELOPMENT, PART II: FEAR AND ANXIETY 342

Early Signs of Fear, 342. The Role of Maturation, 343. The Role of Learning, 345. Changes with Age in the Expression of Fear, 346. Age Trends, 349. Children's Fears as Compared with "Worst Happenings," 352. Persisting Fears, 354. Some Special Conditions and Circumstances of Fear, 354. Factors Contributing to Susceptibility to Fear, 358. Irrational Fears, 360. Anxiety, 360. Values of Fear, 366. Overcoming Fear, 367. Prevention of Fear, 373.

CHAPTER PAGE

11. EMOTIONAL DEVELOPMENT, PART III: ANGER AND HOSTILITY 375

Early Causes of Anger, 375. Changes with Age in the Expression of Anger, 377. Anger Directed Against Self, 378. Factors Contributing to Susceptibility to Anger, 378. Conditions Influencing Susceptibility to Thwarting and Frustration, 380. Hostility Toward the "Authority Figure," 383. Suppression of Overt Signs of Rage, 386. Devious Manifestations of Anger, 386. Considerations in Dealing with Anger in Children, 391. Jealousy, 394.

12. LANGUAGE DEVELOPMENT 401

Early Vocalizations, 402. Content of Child's Early Vocabulary, 405. Spontaneous Revision of Language Habits, 406. Increases in Loquacity, 409. Later Language Development, 410. Mental and Social Orientation of the Young Child as Revealed by His Language, 412. Factors in the Development and Acquisition of Language, 415.

13. THE GROWTH OF UNDERSTANDING, PART I: EARLY AWARENESS, ALERTNESS, AND REMEMBERING . . . 421

Signs of Increasing Awareness and Alertness, 421. Some Early Signs of Self-Awareness, 423. Memory, 426. Capacity for Attention and Concentration, 433. Children's Questions, 436. From Concrete to Abstract, 442.

14. THE GROWTH OF UNDERSTANDING, PART II: REASONING, CONCEPT FORMATION, SELF-AWARENESS . . . 445

Some Broad Developmental Objectives, 445. Expansion of Intellectual Horizons, 446. Children's Reasoning, 450. Children's Information and Concepts, 458. Emotional and Intellectual Elements in Children's Thinking, 471. Gaps in the Process of Thinking and Feeling, 473.

15. CHILDREN'S MAKE-BELIEVE, DREAMS, AND OTHER IMAGINATIVE ACTIVITIES 478

Early Manifestations, 478. Functions of Make-Believe, 480. Functions of Make-Believe in Social Development, 485. Daydreams and Fantasies, 488. Imaginary Companions, 489. Other Forms of Vivid Imagery and Association of Images, 492. Children's Dreams, 493. Projective Methods, 496.

16. CHILDREN'S INTERESTS AND PLAY ACTIVITIES . . . 500

Play, 501. Everyday Interests, 507. Radio and Television Interests, 513. Reading Interests, 516.

CHAPTER PAGE

17. CHILDREN'S IDEALS, MORALS, AND RELIGION . . . 521

Moral Assumptions Underlying Child Psychology, 522. Factors in the Moral Training of Children, 523. Honesty, 530. Generosity, 532. Children's Heroes and Ideals, 533. Religion, 534. Religion and Self-Realization, 540.

18. THE GROWTH AND PREDICTION OF INTELLIGENCE . . 543

Intelligence Tests, 544. Limits of Intellectual Growth, 552. The Influence of Nature and Nurture on Individual Differences in Mental Ability, 554. Effect of Schooling on Intellectual Development, 559. Family and Socioeconomic Status and Intelligence, 565. Gifted Children, 567. Children of Lower Than Average IQ, 572.

19. PERSONALITY PROBLEMS AND THE SEARCH FOR SELF . 575

Components of Personality, 575. Impact of the Environment, 581. Problems of "Adjustment," 581. Social Implications of Children's Psychological Disorders, 590. Knowledge of Self, Acceptance of Self, and Mental Health, 591. In Defense of Pride, 598. The Value of Silence, 602. Criteria of Self-Evaluation, 603. The Language of the Self, 605. The School in Relation to Self-Evaluation, 609. Emotional Stress as a Sentinel in Personality Development, 611. The Place of Expression, Acceptance, and Examination of Feeling in Personality Development, 614.

AUTHOR INDEX 621

SUBJECT INDEX 661

CHAPTER ONE

A Child Is Born

Birth means the coming of a human being who forty weeks earlier was no more than a single cell. He looks helpless and not very handsome. His vitality may be depressed for a time by drugs administered to his mother and the ordeal of being born. But soon he seeks to come to grips with life. Many of his first movements are aimless and undefined but changes come rapidly, even within the first few hours, and some of his earliest activities are well directed. A short time after birth, if he is well, he shows robust sucking movements as though ready to take his first meal even though he has not before been nourished through his mouth.

In the near future his movements will be fashioned into countless skills. Many of the personal characteristics that set him off as a distinct and unique personality, different from his brothers and his sisters and from all others on earth, will be established within a few months and probably within a few weeks or days. As a social creature he soon will be deeply involved in the fortunes of his fellows. In a year or two he will be able to speak. Soon his mental world, which is so limited at the start, will include recollections of the past and plans for the future.

Why study this little child? The answer is that if one wishes to understand human beings at any stage of their growth one must study their beginnings.

It is not easy to understand infancy for we cannot recall our own infancy into the stream of our thought. No events are more important than those occurring early in life, but they are remote from one's recollection. It is not usually until after age three, four, or even five years that a person, as he looks back, begins to pick up

a continuous remembered story of his existence. Yet if a person would understand children, or other people, or himself, he must try to understand what happens in this part of life that may have a bearing on his present way of life.

Stages in the Birth of a Personality

There are three steps in the process through which a person comes into being.

The first step is conception. A person's life as a distinct organism began when he was conceived.

The next step is the process of being born. At this point a person begins life as an individual set aside physically from others.

The third step is the phase during which a person comes into being as a separate self, aware of his existence and his identity, and having knowledge of a continuity of experience that is distinctly his own. This phase begins after a person is born. Signs of self-awareness appear during the first year or two of life. In everyday life we notice such signs when we say a child is self-conscious, cheerfully calls attention to himself, shows pride, or reveals shame and hurt feelings. Manifestations, which others see as beginning signs of self-awareness, appear during the first year of life, earlier than the web of experience a person himself can remember in later years. The kind of remembered awareness of ourselves we have when we are older seldom goes back to the first year.

This process of becoming a distinct self and finding one's self, discovering what one can do, and who and what one is or might be is an important feature in the psychology of the young child, but it is not limited to childhood. This phase of development continues, if all goes well, as long as a person lives. If one is still in the process of finding one's self the third phase of the process of birth is continuing whether one's age be sixteen or sixty-five.

Ancestral Roots

By the time this third phase is well under way, matters of great importance in a person's life have taken place. At the moment he

was conceived much of what he might become was decided by the nature of his inheritance. It was determined whether, for example, his skin will be white or black or brown; whether he is likely to grow up to be rather tall or relatively short; whether he will be slight or stocky in build; and approximately what his profile and the naked contours of his figure at the end of adolescence will be. The child's heredity will also have some influence on his intellectual aptitudes and limitations and the ruggedness of his constitution. To the extent that his temperament and personality are influenced by the physical properties of his body, even these rather subtle qualities of his make-up will show the marks of heredity.

The Passive Phase

The baby who in time will actively strive and plan to take the affairs of his life into his own hands is passive at first. His heredity is handed to him. He did not ask for it. He could not ask for it, nor could he ask to be conceived, or request that he might or might not be born. This is such a simple fact and yet so profoundly significant for understanding a child. The nature of the equipment a child will work with when later he goes about planning his life and shaping his existence is, to a large degree, determined in advance. He cannot change this equipment. There still is room, of course, for a tremendous range in the ways he might use this equipment and in the extent to which he realizes his potentialities as he grows older. Yet there is something final and irreversible about being conceived and being born. There is no going back and only one certainty remains —one will die. The main probabilities of existence have been laid down.

Beginnings of the Active Phase

But the third phase, in which the child comes into being as a person with awareness of himself does not have this finality. The third phase involves the person's existence as known and planned by himself and as realized through his direct personal experience. It

includes the process through which a person discovers his resources and properties, his reaches and his limits, and seeks to shape his ways. This phase of coming into being is not, as the person himself sees it, so completely determined by forces outside himself.

Neither is this phase fixed in point of time, for while the emphasis is on the present it has reference to the future, and it also incorporates the past. Even the past, in this phase, is not entirely unchangeable, for the impact of what has been in the past may be changed by what is now and what is yet to be. A child's past asserts itself in the present, for example, when something he now faces strikes him as frightening or pleasant because of an earlier experience with it, but this effect, reaching out of the past, can be modified. In the phase of developing selfhood there is no chance to be unborn, but there is, according to the experience of the person himself, at least a slight chance, as it were, of being reborn. As viewed from the standpoint of his own thoughts and feelings a person in this phase has the freedom to change and to choose, and he is also aware that much which is unexplored and untried still lies ahead. In this third phase of becoming there is, then, an added dimension; whereas the story of what is *probable* already has ended, the chronicle of what seems *possible* has only just begun.

Knowledge of Early Childhood as Related to Knowledge of Self and of Others

So, as we have said, we need to study the infant not simply to know about him but to understand the older person he in time becomes. As seen by a detached observer, the succeeding moments of early life arrived, occurred, and were over. The hand of history wrote, and having writ, moved on. But from the point of view of the individual, moments of the past and conditions laid down in the past live in the present. To understand children and to understand himself a person must try to understand the child who still resides in him. This means that it is instructive to look back to the beginnings of life, for even though the events that happened then cannot be undone, yet it is possible to do something about them. The facts

of heredity, for example, cannot be changed but their effects assert themselves as long as a person lives, and unless he has some perception of them and a certain amount of readiness to accept them, he may become involved in an endless, futile endeavor to become what he never conceivably can be.

It is also important to study the phase of birth and the period during which a person is beginning to function as an independent self if one wishes to understand and to accept the implications of what may have happened in one's earlier experience. At the time when the child has little power to decide and choose for himself, or to defend himself, experiences occur which bend him toward future ways of doing, thinking, and feeling. Long before the time when a person begins to have a record in his own mind of his development as a person he undergoes experiences which influence his attitudes toward others and toward himself—attitudes of trust or distrust, attitudes of healthy pride or morbid shame, confidence in himself or the opposite. The experiences which gave rise to such attitudes he cannot remember when he is mature enough to pick up the record of his own history, yet it is essential to look squarely at what such experiences can mean.

A person old enough to write or to read a book, such as this, cannot remember the occasions in his early life which led him to count on the good will of others, or when (if such is what happened) he cried himself to sleep again and again, or would have cried himself to sleep had he not learned to be silent to avoid a greater hurt. Yet such happenings may have a bearing on the way he now feels about himself or others. He will not remember the times when he could act out his anger without fear of punishment, or the times of struggle (if they occurred) when he was purple with rage but dared not strike, or when he used the weapon of refusing to swallow his food, or hit upon the discovery that the way to win sympathy was to be or to act sick. He cannot remember the times when he fed happily and comfortably in his mother's arms, or the times when he could not swallow or digest his food because he was troubled. Yet the present whims of his appetite and caprices of his health may have a history extending back to experiences such as these. He

cannot remember the times when he wriggled and screamed with delight at the homecoming of a beloved parent, or (if such was his plight) episodes when he shrank from the touch of a harsh relative, or was tense in the care of an anxious parent, or was moved by grief and was helpless in his distress. He cannot recall that a considerate relative protected him against devastating wounds to his pride or shielded him from experiences which might arouse a desperate fear of being abandoned. Nor can he recall the tortures he went through (if that was the case) in being neglected not in the manner of ignorant parents but by well-educated parents who brought him up according to the best scientific information but did not have the ability to feel deeply about him with a kind of primitive parental passion. Yet his own present tendency to warm up to people or to keep a barrier between them and him or his maneuvers to protect himself from hurt pride may have been influenced by early experiences of this sort.

Such experiences, to the extent that they took place, are part of the record of one's life, and nothing can unwrite them. Yet, even if there is no way to achieve a literal reliving or a detailed recall of this earlier period of one's life, an attitude of accepting its possible implications for oneself may make a great difference in what one can learn from studying the young child. A person cannot be a mature person unless he is able, or at least willing, to try to accept and incorporate into his present existence all that he is—which means all that belongs to his past that might now be operating in the present. Unless one as an older person can, in a sense, be a child, and seek to comprehend what it is to be a child, or what it might mean to have been a child, one cannot be comfortable in one's understanding of children nor can one comfortably accept oneself.[1]

[1] The concept that a healthy and emotionally mature person is one who can accept and integrate his past with his present existence without a need for blinding himself or harshly blaming himself or others is implicit in most full-scale theories of the psychology of the personality, and in psychoanalytic theory, and in ancient lore. It is implied in the admonition, "Know thyself." It is stated more directly in religious language, rich in psychological symbolism, in the Scriptural saying that unless one becomes as a little child one cannot enter the kingdom of heaven (Matthew 18:3).

The First Great Hurdle

Often, as adults look into the eyes of an infant, they wonder what lies concealed beyond them: What goes on in this little head? What kind of mental life? What sort of experience does this human being have in this early stage along life's way?

We can never know for certain what takes place in the child's mind during the first days, weeks, months of life. If we could penetrate into the child's inner world, our own ways of perceiving, thinking, and feeling probably would make it difficult to apprehend what is there and to describe the primitive stuff from which mind is made. But we can at least guess.

What does the birth process as such do to the child? What does it mean from the point of view of his experience and what effect might the happenings connected with an easy or difficult birth have upon him later on? Poets, doctors, and psychologists have speculated about this. Obviously the fact of being born means a drastic upheaval and a tremendous change. The child is thrust from the warmth and protection of the womb, where nourishment flowed through him and where he was not even called upon to breathe, into a state where he must exert effort to obtain food, draw his own breath, and, at times, gasp and cough and struggle to obtain it. He is exposed to changes in temperature, rays of light that strike his eyes, and sound waves that beat upon his ear. Instead of floating in a fluid within confines that are yielding yet firm he now lies loose, naked and unenclosed, free to move as his limbs thrash in empty space. His head sags if not supported. His body falls if not held. If the child who is being born has the ability to sense these changes—to take note of the tremendous contrast—we might expect that the process of moving from the womb into the world would have a staggering psychological effect.

There have been many conjectures about this situation. It has been proposed, for example, that the birth cry is not just a noise mechanically brought about by the first intake of air, but a cry of pain or protest or sorrow or fear. It has also been proposed that the

process of being uprooted and cast from the womb has the effect of a psychological shock, producing a psychic trauma, and that as long as the child lives he has an unconscious yearning to return to the protection and security of the womb.

Just what the child experiences in the process of being born no one can tell, but no one can dispute that the transition from the womb to the cradle is a radical change. There is also, however, the fact that the child who is being born is a very immature and a very unfinished creature. His higher brain centers and the rest of his nervous system are not capable of functioning as those of an older person. The person who is born is not a creature with fully developed equipment for sensing and feeling. He is not capable of perceiving the contrast or experiencing the change as an older person might if he, by a miracle, were physically born again. There is the further fact that the process of being born is a part of a larger total process of growth. The machinery by means of which the mother cares for the child as an embryo and fetus, providing oxygen, nourishment, and the room for the child's growing size, is not designed to care for him indefinitely. If we were to attribute wishes, hopes, and fears to this little child, we probably would have to assume that toward the end of pregnancy he hopes to be born even more than he desires not to be born, and if we judged simply from what his mother says about his turning, squirming, jerking, wrenching, and kicking before he is born we probably must assume that he is more eager to get out of the womb than he ever will be to get back in.

Birth is part of a larger process by which an organism begins as a single cell and develops through the months and years that lie ahead. It is as natural to be born as it was to be conceived and to be involved in the process of development after birth through which the child continues to come into his own as he strives to creep, to walk, to pursue the untried with eager feet, and to plunge into the unknown with a curious mind. In the developmental process from birth to the end of life there is striving and there is a never-ending struggle, and often there is suffering and pain, but in no feature of this process of development does the child spontaneously, without thwarting or punishment from other sources, seek to

retreat into the past. It probably is only an adult who has known what it is to be beaten and who has suffered a cruel loss of hope who could maintain that a child desires not to be born or who could attribute to him a wish, after birth, to retreat into the shadows of an earlier phase of life.

The World Surrounding the Newborn Child

In the environment that surrounds a newborn child there is much that is obvious to the eye but also much that cannot be seen. There is the visible cradle in which he lies. There is also an invisible environment consisting of the thoughts and feelings, the attitudes, desires, hopes, and expectations of members of his family. If all is well, this composite of thoughts and feelings will offer the child a comfortable place. His mother will be drawn to him with feelings of pride in her role as one who has brought forth a child, and she will feel a strong impulse to protect him. His father will be drawn to him with sentiments that no man can know until he has had the experience of being a father. Also, if all is well, older brothers and sisters will be prepared to welcome him, even though they may be disturbed by the events surrounding his birth and perplexed as to what it will mean in their own lives to have a new member in the household.[2]

On the other hand, this environment may not be so hospitable. For one cause or another, the child may be unwanted by one or both parents. He may come unwelcome into a troubled home. He may come as an intruder in the relations between his father and mother or in the relations between his parents and other children

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[2] For discussions of psychological connotations and practical arrangements in connection with childbirth and early infant care, see Grantley Read's *Childbirth Without Fear* (1953). Jackson and Trainham (1950), Moloney (1947), and Bartemeier (1947) offer accounts of the "Cornelian Corner" aimed to avoid separation of the mother and the infant child.

The writings referred to here and in later sections are listed in the bibliography at the end of the book. The date in parenthesis following an author's name gives the date of publication and also, where there are several writings by the same author, this date provides a key to the particular writing that is referred to.

in the family. If so, the impact of such unfriendly or conflicting emotions will soon be felt in his own life.

The attitudes of his elders will be translated into practical acts. These attitudes may determine whether they come to him when he frets and cries, or leave him to "cry it out" for long periods at a time; whether they are hurried and abrupt in their dealings with him or take time to enjoy him and to let him enjoy himself; whether they impose a rigid scheme of child care or try to adapt their care to his own tempo and pace and to the pattern of his own emerging personality.

Apart from the question as to whether the child's coming is completely welcome or viewed with misgivings, there will be tremendous variations between one family situation and another in the feelings and motives that come into play. The child may be accepted for what he is, for his own sake, or he may serve an ulterior purpose, such as gratifying parental ambition, serving as a means of continuing the family name, or fulfilling a sense of duty. Again, there will be wide differences even between adoring mothers. Simply in the practical details of everyday care of the child, one mother may be motherly, self-assured, while another may be anxious, uncertain of her own skills and judgment.

Although there are differences, such as the foregoing, in the setting into which the child is born, the child is not entirely at the mercy of conditions as they are. From the beginning he is not merely a creature of his environment; he helps to create his environment. In his weakness there is strength, for his helplessness draws others to him. Through his appearance and all his ways he commands attention, makes impressions, and, without so intending, influences the attitudes of his elders, whatever they may have thought or felt beforehand. So, a woman who vowed that she could never become "crazy" about a baby may find when the baby comes that he has completely taken her over. A father who was secretly convinced that he could not love a second child as much as the first may discover that it is quite a different story when the new youngster nestles in his arms.

The tide may, of course, run in the other direction if the parents

seem to be "well adjusted" but have nurtured a glorified image of a baby-to-be and then find that the real baby is quite somebody else; if they fear the responsibilities which the child places upon them; or if they are rather mechanical and detached people who shrink from him not just because he is so fragile and small but because they have never really learned to come into close emotional contact with another human being. If a mother is a detached person of this sort she may shrink from the intimacy which the care of a child demands, and in order not to touch him, hold him, bathe him, smell him, or hear his crying she may, even when he is very young, hand most of his care over to others. The only mother (in a psychological sense) such a child will know may be the father who, when he has time, plays a motherly role. Perhaps, instead, a hired maid or an older sister will have to fulfill this role.[3]

Psychology of Pregnancy and Childbirth

Above we have considered the effect on the child of the psychological environment which surrounds him before birth and after he is born. The coming of a child also, of course, has a profound psychological effect on his parents.

Through the generations and in various cultures there have been many superstitions connected with pregnancy; many of these are patently false, but one thing we can be sure of is that pregnancy and childbirth have intense emotional meanings to the mother and father. There have been theories to the effect that a woman during pregnancy is likely to become a little odd, that she is more susceptible to insanity, that she may develop peculiar cravings and make irrational demands. Actually, the psychology of a pregnant woman is likely to show a continuation of the psychological tendencies and traits which she possessed before she became pregnant.[4] Whereas

[3] The difference between a "psychological mother" and a "biological mother" (who may or may not be a psychological mother) has been discussed by Deutsch (1944).

[4] For statements concerning the psychology of pregnancy and attitudes toward having or bearing children, see Skottowe (1942), Thompson (1942), Dennison (1940), Read (1953), Jones (1042), Ordway and McIntire (1942), and a symposium on early infancy edited by Senn (1950).

the period of pregnancy has its own special problems it can probably best be understood when viewed in relation to the woman's total way of life.

Pregnancy may, however, give added intensity or a new emphasis to emotional tendencies that already exist. The mother who has a zestful approach to life may be in her element once she is pregnant. She has a glow and is exuberant in the knowledge of her fertility. If the pregnancy is her first she may have a feeling of self-fulfillment and make a peaceful departure from an old into a new state of existence. Even if the mother has a warm welcome for motherhood, and is a realistic person with healthy attitudes toward herself and others, pregnancy will be quite a trial at times. If there are such special difficulties as financial problems, heavy duties in the home, complications due to the fact that other members of the family become "difficult," the test will be a very severe one. Pregnancy, like any venture in life that involves a process of growth, and which means taking a chance with one's own role in life and with the destinies of other persons (a chance a woman very definitely takes when she brings a new human being into the world), is likely to be accompanied by some struggle and apprehension and pain. It is unlikely that any sensitive woman who is honest with herself could go into such a fateful undertaking without some fear and foreboding. But against this, there is also something challenging and rewarding in the experience and in the prospect.[5]

If a mother has a relatively healthy and matter-of-fact attitude regarding herself, without a compulsion to be perfect, or to hold herself up to impossible standards, she probably will view her pregnancy in much the same spirit. If she is the kind of person who ordinarily blames herself quite severely—one who suffers from feelings of guilt, blaming herself when all others would exonerate or forgive her—she quite likely will have guilt feelings in connection with pregnancy. She may worry for fear she has not done the

[5] In a study in which mothers spoke about the advantages of having children a large number mentioned satisfactions of this kind. See Jersild, Woodyard, and del Solar (1949).

right thing. She may have forebodings that the child will turn out to be deformed or subnormal because of something she has done or has not done. She may blame herself in advance for something that never will happen, for her misgivings about herself may lead her to imagine that disaster will strike her or her child as a kind of punishment. Such feelings of guilt may be more intense if the mother actually has misgivings about having a child, even though she is already pregnant, and if she resists the idea of being a mother.

Again, if a mother feels unfairly treated in the sense that she thinks her background is not good or that her heredity is not perfect, or that her family, her husband, and her present circumstances of life are not as they should be or equal to what she deserves, such feelings may invade the thoughts and feelings she has with regard to the bearing of her child, and pregnancy may become to her, at least in part, another item in the score of grievances that life has inflicted upon her. The time of pregnancy may bring added burdens if the mother is very prudish and squeamish about the physical properties of her body and if she shrinks from the idea of having a pregnant look or from the prospect of being naked and exposed in the care of doctors and nurses.

If the mother who bears a child is content with her role as a woman and accepts herself as a woman, the bearing of a child is a way of confirming and expressing her womanhood. But if she has difficulty in accepting herself as a female, or feels that she, as a woman, has been cheated by nature and not given her just rights, such protests against womanhood may take the form of an unrecognized or recognized protest against motherhood. Instead of falling into the biological role of being a mother she may approach the period of pregnancy as though she were two people—a biological creature in whom the processes of nature are taking their course and a psychological creature who resists what is going on.

If the mother is contented in her relationship with her husband, the bearing of a child may be a happy outcome and expression of this. But if she has feelings of distrust or lack of confidence with respect to her husband, these feelings probably will also be reflected

in one way or another in the thoughts she has with regard to the bearing of the child and her anticipations concerning what the child might be like.

Pregnancy may add a happy quality to good relationships that already exist between husband and wife or aggravate difficulties that already prevail. According to one view, the period of a wife's pregnancy is a time when some husbands seem to think that they have the right to stray into intimate relations with other women. The likelihood is that if there is trouble on this score it is not something that pregnancy brings about. But pregnancy can aggravate tensions and difficulties that already exist in the intimate relations between husband and wife. If a wife normally enjoys physical relations with her husband she will probably continue to do so during pregnancy, but if there is friction on this score the fact of pregnancy may be used as an extra excuse for avoiding physical intimacy.

The more fully a woman accepts herself and the more fully the father and mother accept each other, the more the conditions of pregnancy, in spite of the apprehensions that it creates and inconveniences and deprivations it involves, represents something that is welcomed. It may come as a realization of a desire for consummation and fulfillment which began to take root when the father and mother first became acquainted and had not yet become married, or engaged, or intimate. In our culture we usually assume that a woman might feel this way more than a man; perhaps this is so, and perhaps it is not.[6]

Two Approaches to the Understanding of Children

There are at least two approaches that can be made in trying to understand a child.

We can approach him with an eye upon the *objective* features of his make-up and conduct, the features of his make-up and behavior that can be seen and measured. We do this when we measure his height and weight, test his strength, look at his overt behavior,

[6] In the psychological literature women seem to have written more intimately and revealingly about their own sex than men have.

record his language, and take account of physical aspects of his health and care.

We can also approach him from the point of view of inquiring into the *subjective* or "inward" aspects of his own individual experience: What kind of awareness does he have of his own existence? What does the world look like from his point of view? What might be his thoughts and feelings? When we study the child from this standpoint we are interested in the nature of his awareness of his own existence and the meaning and quality of his sensations, thoughts, and feelings from his view.

From an objective point of view we are interested, for example, in knowing that a three-year-old child is three feet tall. From the subjective point of view we are interested not solely in this statistic but in what it means or might mean to the child. Objectively, the child is near the average in height. Objectively also, he is a big child as compared with his one-year-old brother and he is a little child compared with his ten-year-old sister. But the subjective dimension as viewed from the child's standpoint may be something else. He may perceive himself as a rather large child if all his close age-mates happen to be shorter than he, or he may be quite acutely aware of the smallness of his size when he observes that the privileges he wishes for himself are granted only to bigger people. A child's perception of his size cannot be measured by simply finding his height in inches. He may also have feelings about his height. He may feel rather good about it or he may wish he were taller or he may even have certain grievances about it on the ground that his smallness deprives him of freedom and opportunity to do as he likes.

The subjective view a child has of his experience and of circumstances in the world about him may or may not be in keeping with the view held by others. For example, a child may feel that his mother shows favoritism toward a younger brother. From the point of view of the mother or from the point of view of a visitor this may not be true at all. It might even be true on all counts, except the child's perception of the matter, that the mother actually favors him more than his brother. But this does not alter the significance of the fact that he feels unfairly treated.

Similarly, let us take three older boys who are running a race. Henry comes in first, Billy second, and Sammy third. Henry was the victor but he does not feel particularly victorious. He knows he can beat those two boys and he wants keener competition to get a real test of himself. Billy, although he only came in second, has a feeling of triumph. He isn't as sure of himself as Henry and from his point of view it was an achievement to be counted in on a race with Henry and to come in ahead of Sammy. And Sammy too, although he came in last, and, in a sense, was a failure, may feel very good about the race for although he did not win or place, the other boys at least let him in on the race, and that is very satisfying to him.

We could multiply examples of this sort. Paralleling the external or objective facts about a child's development, his behavior, his ability as compared with others, or his emotions as viewed in the light of his actions, he has personal perceptions and feelings which may or may not be in keeping with the objective facts that others can see, and these may be different from what might be learned simply by noting the external facts.

The Self as the Personal Center of Reference

This subjective aspect of a child's world constitutes part of what we call the *self*. When a child is born he is a full-formed physical creature but he is not yet a separate self. As noted earlier, that which we call the self begins to come into being from the time of early infancy, and it is in process of becoming as long as a person lives. Almost from the time of birth, all human beings are involved in the process of learning what they are, who they are, and what they might become. The development of selfhood is sometimes spoken of as "finding the self." It involves a process of discovery, and this often involves a search and a struggle.

The self is what might be called the child's inmost subjective and private personality, for it includes his awareness of his existence as a separate creature in his own right. It is all that a person calls "I"; it is all that he calls "mine." It is his world as experienced by

him, and as we have noted this may be something quite different from the world as it appears to others. As the child develops, the self which we call *his* includes a system of ideas and attitudes. As he becomes able to formulate his thoughts and to crystallize his attitudes, the self includes a system of memories, beliefs, values, hopes, and expectations.

The self is subjective, as we have said. It is seen from within and known only to the person himself. It differs from the external and objective as seen by another. As we shall see in later sections in which we deal again with the concept of the self, the self can be regarded as *objective* in the sense that a person can to some extent look at himself as he might look at an object. But the main point we need to notice here is that the inner and subjective dimensions of experience may be distinguished from, and may in some ways be quite different from, the outer and objective dimensions that meet the naked eye.

Outward appearances may be revealing or, as the saying goes, they may be deceiving. For this reason, from the time when the child is quite young it is not possible fully to understand him simply by piecing together his separate acts as we can directly observe them. It is necessary, to a greater or lesser degree, not only to observe but to interpret. We cannot understand the child with whom we associate from day to day without constantly inferring how he thinks and feels from what he does and says and without to some degree interpreting these feelings and thoughts from the standpoint of what they mean to him. He stamps his foot, let us say. We infer that he is angry. We do more, however, if we are trying to understand him: We try to appreciate his anger and what his anger stands for in his experience, even if, from a common sense point of view, as we see it, he really has nothing to be angry about and is being very unreasonable. His anger, from his point of view, is no less genuine just because, from another point of view, it seems groundless.

The process of interpreting what an experience might represent from the child's point of view is essential, yet it is easy to be mistaken

in it. For when, by a process of interpretation, we try to understand what a child's experience might mean from *his* point of view, we must do so through the medium of *our own* experiences. We have no other anchor or reference point, for we cannot directly experience his experiences, or think his thoughts or feel his feelings. We draw upon our own thinking when we judge what the child thinks and upon our own feelings when we try to fathom how he might feel. In doing this we can be very much in error, for instead of accurately interpreting, we may simply ascribe to him ideas and feelings that do not reflect his ideas and feelings but simply our own. The greatest difficulty an adult has in dealing with a child is to view things from the standpoint of the child. It is so easy for the adult to read his own thoughts into the child's mind, and to project his own intentions into what the child does, or to assume, from the child's silence or the seemingly rambling and diffuse nature of his overt behavior, that he has no thoughts and no intentions and is just a blank slate.

Self-Observation and Observation of Children

An adult cannot solve the difficulty involved in understanding a child simply by schooling himself in the art of being an objective observer. He cannot understand his child simply by cultivating to a perfect degree his skill in being an onlooker. When a person views a child with complete objectivity he may be quite accurate in what he sees, but the rub is that there is much he will miss. To observe a child in a manner that yields a glimpse that is meaningful in the sense that one can appreciate what is going on in his world one has to be a *participant* observer, not solely a *spectator*. The participant observer is one who takes part, one who, to a degree, *shares* or seeks to share in a common experience. The spectator, on the other hand, is an onlooker who stands by himself, not entering into a relationship, and is uninvolved in what he sees. It is not here suggested that one of these kinds of observation is good and the other bad. Each serves a purpose.

As a spectator one might see the signs of the child's anger or

grief, or note that he seems otherwise disturbed, and one can take practical steps to comfort him or to restrain him or be rid of him. But one will not have a significant awareness of the hurt of it, unless one is, to a certain degree, involved in it. The "certain degree" of involvement consists in this: One cannot appreciate another's feelings unless one's own feelings come into play to some degree. This does not mean that one must be as angry as the child is in order to appreciate his temper tantrum. If we became that angry we would be so absorbed by our own tantrum that we would lose sight of the child's.

One can, to be sure, reach the intellectual judgment that this child must be joyful for he is chuckling, or angry for he is stamping his feet, or sad for he is weeping. For many purposes, this amount of understanding is all that is needed. If our task is to carry out a mechanical manipulation, such as yanking out a loose tooth, or applying a tourniquet to a bleeding limb, or describing human development from a mechanical point of view, it probably will be better if we view the child in a detached way. But if we seek to understand a child in order to communicate with him, share with him, enter into a meaningful relationship with him, associate with him as a father or mother or friend or fellow human being, or try to know him as he is known to himself, something more is needed.

If we become completely subjective (if that were possible), we would also fail to establish communication and fail to understand. What an observer sees in the child and the impression he has of the child's feelings may be distorted, falsified, and confused by the observer's own thoughts and feelings. For example, if an observer is annoyed he may see something offensive if the child winks his eye, or grins, or keeps silent, while another observer might see nothing to be annoyed at. When an observer's own feelings come into play he may have a perception of another's feelings that is just as inadequate as the perception he would have if he were not involved at all. The participant observer's perceptions may, indeed, be quite false. Might not this kind of observation be dangerous? Would it not be safer to cling to the role of being a spectator so that one

may be objective and accurate? There are two answers that can be given.

First, the choice as to whether one will view the child as an object or try to see him as one with whom one shares a common humanity properly depends on the responsibility one has for the child and the role one desires to play.

As a matter of fact, the practical demands of life help to decide. A person cannot be equally involved as a participant observer of all children. He may with some be deeply involved, with others very little. Even in his dealings with his own pupils or his sons and daughters his role may from time to time range all the way from that of a passive spectator to that of a deeply involved participant.

Secondly, if the choice is to understand a child from the standpoint of a participant rather than from the standpoint of a spectator, it is important to develop safeguards against the danger of mistakenly interpreting the child through the bias of one's own ways of thinking and feeling. The greatest safeguard lies in an effort to understand one's self. To understand another, one must be in a mood to grow in self-understanding, to face one's feelings, and to deal with emotional currents that begin to flow as soon as one enters into a relationship with other people.

Knowledge of one's self determines to a large degree what one can perceive in others, and knowledge gained from being with others contributes to the clarity of one's perception of one's self. Such understanding does not mean simply an attempt to gain academic knowledge about anger, fear, and other feelings but an endeavor to realize their significance. We shall have more to say on this in later chapters. But this we reiterate here: The process by which one can gain understanding of children is closely tied to the process by which one gains understanding of oneself unless one would "understand" a child simply as one might view the external dimensions of an object out there in space.

We turn now to a discussion of principles and points of view that might guide us in the study of human development and then, in

Chapter Three, we will take a closer look at the behavior of the child at birth. At the earliest levels of development there are many aspects of a child's life that an adult must view mainly from an objective point of view because they are rather remote from his own remembered experience.

CHAPTER TWO

Nature and Course of Human Growth

This chapter deals with principles of development and with concepts and points of view underlying the study of developmental psychology.

Considerations in a Philosophy of Growth

Child psychology offers to students a vast accumulation of scientific findings and theories, but to understand the child we need to fit these fragments into a larger view of life as a whole. It is necessary to see the child in the light of a conception of humanity and a philosophy of growth that embraces more than can be gotten simply by looking at the child at any one period of the life span. But why should we go into such a conception of humanity and a philosophy of growth? On this there are differences of opinion. Some instructors and readers who use this book probably will have different views than those the writer here sets forth. But it is all right to risk disagreement of this sort. As a matter of fact, it is a very good risk to take, for in the interest of probing into the meaning of what we are studying and the purpose of our study it is better to examine underlying viewpoints, and to disagree about them if need be, than to take them for granted (or not to have any!).

Life as a Form of Striving

What is the mainspring in human conduct and what is the main impetus in the strivings, activities, and experiences that constitute the child's way of life?

According to one view, a child's activity is prompted by a need to

overcome obstacles that lie in his way: He acts because of frustration, problems, irritants, or other conditions that cause unrest and upset his equilibrium. There are irritants due to hunger and other so-called primary needs, problems arising out of obstructions in the physical environment, frustrations due to friction between the child and others, problems arising out of clashes between conflicting tendencies within himself, and so on. According to this view, a child behaves much like a certain dog, Miltiades, who was never active except when he itched, and then the one compelling passion in his life was to scratch the itch so that he might return to a state of inactivity; however, he never had a yen to go places and do things on his own accord. In a figurative sense, a life according to this view consists in a constant effort to keep one jump ahead of the sheriff. The emphasis is essentially negative: The motive is to relieve, to be rid of, and then to get back to a state of equilibrium.

According to a different view, living involves a positive striving. The organism is endowed with an impetus to mobilize its resources and put them to use. It has what has been referred to as a self-actualizing principle. It does not seek simply to achieve equilibrium. The most significant developments do not consist solely in struggles to overcome a disturbed state, or to be rid of something, but also in strivings to gain something—to put potential abilities to use, to enter into experiences that utilize capacities for doing, thinking, and feeling, and for sharing with others. According to this view, it is natural to seek, to strive, to struggle toward a kind of self-fulfillment. Included in this view is the implication that life does not consist solely in getting away from something bad but that the highest good in life is the living of it.

Which of these two opposing views is best suited to developmental psychology? The answer, at least as far as this book is concerned, is that there is a positive, forward impetus in growth which represents a kind of seeking and not simply a kind of struggle for riddance, relief, and escape. The healthy child, like the healthy youth and oldster, is constantly involved in a process of self-realization. This does not mean that he does not deal with irritants and cope with frustrations. In the process of living and in the process by which a growing person

comes into his own and realizes himself there is likely, along the way, to be considerable frustration and also much suffering and pain. The main point is that there is a forward impetus in growth; a growing child seeks to be himself, to discover himself, to realize his resources (including his resources for doing, thinking, and feeling), for standing independently on his own feet, and also for being deeply involved in interpersonal relationships with others. In this process he must risk and venture, and this may mean failure as well as success, painful consequences as well as pleasant rewards.

Spontaneous Use as a Feature of Growing Ability

One outstanding feature that can be observed in a child's development is that as his capacities for doing, thinking, and feeling emerge in the process of growth he has an impulse to put them to use. Development involves both mechanical and dynamic changes. When the mechanics involved in creeping, for example, have been established, a child will creep of his own accord even if there is not external lure, such as a toy, to entice him from one spot to another. When his equipment is such that he can stand, he repeatedly tries to stand, even if there are obstacles and despite unpleasant falls. In his language development he industriously coos, babbles, and prattles, and in time he will practice words and phrases over and over again.[1] As he becomes able to imagine, he plunges into make-believe. As his intellectual abilities develop, he exhibits a lively curiosity; he asks questions, he explores, he experiments, he seeks to know. This is also true in other aspects of his behavior. From early infancy onward, in all aspects of his development, a child will set himself tasks, and he will practice and drill of his own accord.

These examples illustrate a principle of development—*the principle of indigenous motivation*, wherein an integral feature of the development of a capacity or power is a tendency to use that capacity or power. The machinery of development is equipped with a self-starter.

There is a strong positive motivation in childhood behavior. It is true, of course, that negative motives also come into play as the child meets with thwartings and frustrations and encounters conditions

[1] Numerous examples of self-initiated practice are given by Shirley (1933a).

that frighten him, or arouse his anger, or bore him. Moreover, the impulse to put growing powers to work may be thwarted, discouraged, or diverted. Also, as a child matures and his abilities expand, increasing competition between different interests will arise. Along with the expansion of what he is able to do as he becomes older, a youngster's interests will also be increasingly influenced by what his environment offers or denies. Interests in one area may be stimulated by a taste of successful achievement, and potential interests in another area may go sour if the child is pushed beyond his depth. There is the further fact, of course, that interest in any performance may lag when it is fully mastered and no longer serves as a challenge or as a means toward further accomplishment. These factors make it more and more difficult to detect the principle of indigenous motivation as a child grows older.

Struggle as a Feature of Human Existence

However, as we have said, the process of growing up is not just a continuously pleasant forward jaunt. Growth is accompanied by growing pains. Every hurdle in development involves a hazard, and every gain is made at a price. When a child is able to walk, he is able to walk not only into new interests but also into new troubles. In social development, as he becomes capable of tasting the experience of being an accepted member of a team, he also faces the possibility of being rejected by his fellows. When, in his mental development, he becomes able, through his imagination, to anticipate a future pleasure, he also becomes able to worry about what the future will bring. A gain in power does not mean a gain in composure. In addition, the more a child can do for himself, the more there is for him to do. Gain in ability usually brings increases in responsibility.

New opportunities that are opened up in the process of development beckon to the child but they also threaten him. Because of this, children often seem to have mixed feelings about growing up. It is nice to be big, but there is a kind of security in remaining small. The same can be observed in adult years and in old age. An adult desires, for example, to venture into a new job, or to pursue a new or

different line of thought, but the old moorings are more secure and more comfortable, at least for the moment, like a nearly outworn pair of shoes. Quite often during childhood and even in adult years there will be conflict between a desire for independence and dependence. The more independence a child achieves, the greater his responsibilities become. One expression of this is that children sometimes look forward to a new milestone in their personal lives (such as starting school, leaving home to go to camp) with a mixture of eagerness and dread. Another expression of this phenomenon is that children (and adults) after making a tentative advance in their growth sometimes fall back upon an older position. In a time of great stress, the youngster who has just begun to walk will return to creeping for a time. This is called *reversion* or *regression*. It can occur at all ages and among the most mature pillars of society. The distinguished surgeon who is on the brink of exploring the idea that some ailments he has treated with a knife may be mainly psychological in character may regress to the securer position of orthodox surgery. The college professor who is on the threshold of developing what is for him a new and challenging outlook on the scholarly discipline to which he has devoted his life may be frightened by the new, and revert to his old academic views. This tendency to fall back upon an earlier position is not always something to deplore, for it is a means whereby a person, at any time in his existence, can find a refuge when the possibilities of life become too much for him.

Can the development of a child be painless? Probably not. It is possible in theory but probably not in fact for a child to develop and use the potentialities of his nature without encountering fear, hostility, anxiety, grief, and disappointment. There probably cannot be self-actualization without some anguish.

To grow means to venture, and ventures may go wrong. As already noted above, when first he tries to walk he may fall and hurt himself —yet he would rather risk a painful fall than creep his way through life. If he runs, he may stumble, but he would rather take a chance on running than walk forever. If he seeks friendship and approval he may be rebuffed, yet he would not always sit in lonely solitude.

Whenever a child seeks to fulfill an expectation he faces the prospect of joyful fulfillment but also the possibility of unfulfillment, and he runs the chance of disappointment. The more eager he is, the sweeter will be the experience if his expectations are realized and the more bitter the outcome if they are not. Again, unless a child lives a life of complete negation, he will get into situations that frighten him; and fear hurts. He will face circumstances that thwart and threaten him and make him angry, and anger is a painful emotion. He probably will know what it is to suffer sorrow and to feel the pangs of grief, for if he exercises his capacity for affection and loyalty a person he loves may be lost, and a thing he cherishes may be taken away. In the process of drawing upon his capacities for desire, passion, and tenderness, he may fall in love and if his love is returned it is wonderful; but the person he loves may fall in love with someone else, and that is a very painful situation to be in. Yet as an enterprising, growing person, he would rather love and lose than never love at all.

As a growing child ventures to use his capacities for relating himself to others he may realize the joy of companionship, but sooner or later he will also know what it is to be lonely. As he realizes his possibilities he not only will see what close companionship with others might mean but he will also realize that there is a wide gulf between him and many of his associates, each of whom in his own way is wrapped up in himself.

A child may meet hardship by very virtue of his enterprise as a young person. His loyalty to the group may clash with his loyalty to his parents. He seeks acceptance, but conformity to demands of the group may violate his self-respect. He faces other possibilities of hurt. As an adult, one way to fulfill himself is by finding a mate and having children and therein finding one of the richest rewards of life. But to have children also means taking on a great deal of trouble, even though it is worth the cost.

So we say that a growing person cannot reach his full development without encountering difficulties and without being hurt. There are even some possibilities in his nature he cannot tap unless he has

suffered. One of the greatest achievements of the mature person is a capacity for compassion, and probably no one can realize compassion unless he himself has suffered.[2]

But we must distinguish between suffering that is growth producing and suffering that hinders growth. The healthy person is not one who never is hurt. He is one who can learn from being hurt. The healthy person is not one who is without fear, anger, hostility, or anxiety. The healthy person is not one who is without worry, or tension, and it is not the absence of vicissitude that marks the healthy life. Rather, it is the ability to venture forth even though the venture may be painful, and the ability to draw something constructive from it.

Social Origins of the Individual

A philosophy of growth must take account of both the individual and the society in which he lives. It is in a social setting that the child finds elements that are essential for his own self-fulfillment. A child standing all alone, completely divorced from society and from the developments that come through fellowship with others, would not be a child (except in the sense of being one who is yet young). He would not be a human being in our usual sense of that term. Humanity is not an individual possession. It is something which, if one has it at all, one has in common with others. The child's capacities as a human being develop through his relationships with other human beings. Even that which may be regarded as a person's most individual possession—his inner self—has social origins. When we speak of the individual and the social we speak of two manifestations of the same continuum. We shall have more on this in later chapters.

The Healthy Individual and the Healthy Society

The individual as viewed in his own right may be healthy or unhealthy in the sense that he is realizing his potentialities or is living in

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[2] The concept of compassion in relation to emotional maturity is discussed in Chapter Nine.

ways that involve a distortion and misuse of his capacities. The society in which he lives may also be healthy or unhealthy. In many ways there may be a clash between what society demands and what is best for children's immediate development, their eventual welfare, and for society's own good. The "normal" toward which we strive in a society and the standard that is set by the society we live in may be healthy in that it encourages and aids the fulfillment of its members, or it may be unhealthy in that it curbs spontaneity and imposes stifling stereotypes on individuals. A child's growth cannot be appraised simply in terms of the extent to which he conforms to the norm or standard set by society. "Social adjustment" may mean that the child has surrendered his right to realize his capacities. Good "social adjustment" according to the norm in a given community may mean, for example, that a child must suppress his capacity for being generous and friendly while bending all his energies toward being competitive. Good social conformity may mean, by way of a further example, that a child must learn to read in the first grade, even if his own individual growth pattern is such that it would be better for him to delay and that he might, in the long run, be a far more accomplished person within the academic sphere if his academic pace were not being forced by social demands.

There may also be a struggle between the child and the society in which he lives, not because of unhealthy social demands but because society is making demands that are healthy and that will, in the long run, further and promote the child's development. In a healthy society there are demands for various kinds of discipline which are necessary if people are to live amicably and productively together. But the process of discipline, through which a child modifies ways of his own that would eventually be unhealthy for him and damaging or disturbing to the society, is likely to be quite uncomfortable at times.

But while society is essential for the individual to realize his possibilities, this does not mean that healthy development requires good social *adjustment* as we often employ that term. "Good social adjustment" may simply mean that a person clings so to conformity that he surrenders his individuality, and, like an oyster, has no taste

of life except from the brackish brew that already has flowed through a million other oysters.

Dimensions of Growth

In developmental psychology growth has several meanings. There is growth in a physical and physiological sense as it appears in changes in size, changes in dimensions, and in the physical properties of the body's muscular strength and capacities. There is growth as a *process of maturing* which brings about a change in the functions a person can perform, changes in ability, and brings about expansion in scope of living. There is growth as a *process of continuous reorganization* of the new into the old. Such growth may continue as long as there is life. Then also there is growth that seems to involve a *creative process* in the sense that what emerges in the course of experience does not seem, from the growing person's point of view, to be determined solely by the nature of the environment or the nature of his hereditary make-up; instead, as he sees it, he has a hand in shaping the course of his existence, if only in a small way.

Heredity and Environment

Heredity and environment complement each other. To understand children it is necessary to recognize the influence of both heredity and environment, and the more fully we take account of the importance of one of these factors the more we also shall see the importance of the other.

The child cannot discover what his inherited capacities might be, and he cannot realize them unless the environment is propitious. The more stimulus and opportunity the environment offers the more it will underscore the importance of heredity, for it will give opportunity for inherited qualities to come to the fore. In a school situation which has a stimulating program in music and in the graphic arts it is likely that children will discover (and bring into use) aptitudes for music and art that otherwise would go unnoticed and undeveloped. By the same token, the more we recognize the im-

portance of heredity the more significant the environment becomes —for a child's inherent potentialities count for little or nothing unless there is an opportunity in the environment to realize them.

The concept that a child's heredity has an important bearing on his life does not mean that we write him off as one whose fate has been determined in advance. Instead, respect for a child's inheritance is essential if we are to respect each child as a creature in his own right. Respect for a child's individuality, including his unique endowment, is necessary to promote his optimal growth. Without proper regard for the child's own limitations and possibilities, parents and teachers may place unrealistic and unwholesome expectations upon him and upon themselves. They may strive to change him into something he never can become. In so doing, they are likely to neglect possibilities that might be realized.

The Norm

The concept of the norm offers a convenient reference point to describe or to measure behavior and ability. When we say the average child of three is about 3 feet tall we have a norm or standard. But the norm is descriptive; it is not evaluative. To be "normal" is neither, in itself, good or bad—it merely means that one happens to stand at the statistical midpoint. Normality is not in itself a healthy or unhealthy state; it may be either. It is not constructive if the "normal" way of life in a certain community demands that no real boy wears rubbers or overshoes on wet winter days, or that no real boy is interested in making more than a grade of 75 in arithmetic. But the standard of normality may be constructive, like for example, the idea that all able-bodied children in a small island community should learn to swim.

Dilemmas in Development

The process of development confronts the growing person with a succession of dilemmas, involving goals and alternatives that to some degree clash with each other.

A person from an early age seeks love and wittingly or unwittingly tries to be lovable, or at least attempts to attract favorable attention. There is a powerful need to perceive oneself as an acceptable creature. But from an early age the child also has a powerful drive to be independent, to be his own man, and in the process of striving to build and preserve his own individuality comes into conflict with demands for peaceful conformity that may be necessary to preserve the good will of others.

There are other dilemmas. A child wants attention, but not too much. He likes to be "babied" but the desire for being babied conflicts, in time, with his desire to be big.

As he grows older, he throws himself into his social group so much that there may be conflicts between what his peers demand or expect and what his parents demand or expect, and he must find his way through this and at the same time face the dilemma that what his parents want of him or what his peers want of him may go counter to his own wants as a person.

The Paradox of the Self

Each child strives to be himself, to realize his resources, to come into his own. In other words he strives for selfhood. But while the self shows a powerful impetus to grow, it also, as part of its essential character, has a strong resistance to change.

This is the paradox of the self: It is a changing, growing phenomenon, and it comes into existence by a process of learning, yet it also is strongly geared to prevent change. It is both flexible and rigid. From the time when the child begins to become aware of himself, and to take thought of who and what he is and begins to have attitudes regarding himself, he is constantly in the process of expanding his perception of who and what he is, and he is constantly involved in experiences that might help to revise or redefine his conception of who he is or might be. Yet from an early age he also is eager to preserve whatever concept of himself he then may have, and he may strongly resist anything that might threaten to change it.

The Meaning of Maturity

Along with development goes a process of maturing. Maturity is not an end-point or final outcome but a quality or characteristic that can be attained relative to any stage in the life span.

Developmental psychology recognizes that to understand the individual and his possibilities at any age it is more important to examine his potentialities and his resources, and the manner in which he uses these, than to measure how much or little he has of this or that trait compared with other persons of the same age. It is essential also to view him as he is—for that is what now counts—rather than to measure how much or how little he has of a certain trait or ability as compared with what he had when he was younger, or what he might have when he is older. Maturity, in this sense, is not a distant goal but a present reality: Anyone is mature to the extent that he has realized, or is in process of realizing, his capacities for doing, thinking, and feeling and for participating in life at any given phase of the life span. From this point of view a three-year-old who is living up to his promise as a three-year-old is more mature than a thirteen-year-old who can achieve much more but who is not making use of the resources he has at the age of thirteen.

An individual, in any stage of his development from infancy to old age, is "mature" to the extent that up to this juncture he has succeeded in drawing upon the resources of his nature and in realizing his potentialities for thinking, feeling, doing, and participation in the affairs of life.

Development as a Product of Learning and Growth

Throughout the period of a child's development two factors are at work—growth and learning. These factors are interdependent; they cannot be isolated in pure form, yet they can be separated for purposes of discussion. In everyday speech we continually make such a distinction. We note that a child has *grown* 2 inches in height since

we saw him last and that he has *learned* to recite "Jack and Jill."

When we say a child has grown in a physical and physiological sense we refer to changes that normally occur in a healthy child with the passage of time and that have such results as an increase in height, weight, and length of bones, and changes in bone structure and in the structure of parts of the nervous system. As against this, "learning" represents a modification of behavior that has come about by virtue of experience, use, or exercise. The term "maturation" is also prominently used in discussion of development. This term, which has many general as well as special meanings, denotes, in a developmental setting, the process of ripening, of moving toward a fuller development of the potentials of the organism. The foregoing statements indicate that growth and maturation have a meaning in common. However, as sometimes used, and as used in this book, the term "maturation" denotes not solely change in physical characteristics but also the changes in *function, in capacity to perform or behave,* that become possible through changes in the physical characteristics of any part of the organism.

These distinctions, like the illustration above, oversimplify matters somewhat, for growth and maturation do not take place in a vacuum. The two processes usually go on together.[3] Yet it is useful, for practical reasons, in connection with the rearing and education of children, to make a distinction between changes affected by learning and by growth and maturation. The child's education begins at birth, if not before. Much of this education takes place through countless contacts with his daily environment that are not definitely planned; but from the very beginning much in his environment and many experiences designed to promote his development are con-

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[3] An example of the fact that internal changes that will have an influence on behavior may be going on apart from "learning" or exercise or use or practice, as a result of external stimulation, is offered in a study by Carmichael (1926) of embryo salamanders and frogs. An experimental group was placed in a chemical solution which anesthetized the animals sufficiently to prevent movement in response to external stimulation without causing impairment of growth. When transferred to ordinary tap water at a time when animals in a control group were just beginning to make swimming movements, the experimental animals also soon proceeded to make swimming movements, and within half an hour it was difficult to distinguish them from the controls.

trolled by his elders. The huge budgets involved in the formal schooling of children represent only a small fraction of the total outlay of time and means devoted to the training of children from early infancy. To make this investment yield the best returns for all concerned, to prevent the discouraging effects of failure, and to make the best use of the stimulus of success, it is important to try to adapt the child's training to his growing abilities.

Growth Factors in Establishment of Basic Coordinations

During the first two years of life the growth factor plays a predominant role in the development of ability in the basic coordinations involved in locomotion (such as creeping, standing, and walking) and in prehension (such as reaching, grasping, and apposition of thumb and fingers in handling an object). This does not mean that these accomplishments simply thrust themselves upon a passive organism, for the healthy child spends much of his waking time in exercising and in trying out his powers. It does mean, however, that the impetus for these early developments springs largely from within. There is not much that an ambitious adult can do to hasten them. In one study (Ames, 1940) in which the movements and manipulations of infants were recorded by a motion-picture camera, it was noted that the fact that new and often complex behavior patterns can appear for the first time in a form so complete that several weeks—often several months—of exercise do not appreciably change either their form or speed. This strongly suggests that such patterns are determined by maturation rather than from experiences involving an effort to use these behavior patterns.

In one study (Dennis, 1938), two girls were kept in a very restricted environment until they were seven months old. They spent their time in separate individual enclosures; they received no toys; no one played with them; and they received little or no attention beyond what was necessary to take care of their routine wants. Yet the progress of these children in many aspects of their behavior did not differ substantially from the progress made by other children in a normal environment.

The retarding effects of deprivation would no doubt become in-

creasingly apparent, at least in a number of performances, if the infants had been reared in this way well beyond the age of seven months. But as far as they go, the findings indicate that the small infant is not a creature who is entirely at the mercy of what his environment affords insofar as some of his activities are concerned so long as he is well fed and housed, free from disease, and has some freedom to exercise in his own way. The impulse to grow is strong and in spite of lack of encouragement the child finds means of exercising his growing talents to some degree.

In another study (Dennis and Dennis, 1940) it was found that the infants of Hopi Indian mothers who followed the practice of using cradle boards—a rigid structure to which the infant was bound and on which he spent many of his waking hours—during much of the first year of life did not differ substantially in their early motor development from infants whose mothers did not use the cradle board.

Experimental Studies of Effects of Training in Relation to Maturity

It is not possible to get a child to skip a grade in his development by giving him extra or unusual opportunities. In many studies it has been found that the gain a child gets from opportunities to practice, use, or exercise a performance will be determined by the level of maturity that he has reached when the opportunity is provided.

In a number of performances, a relatively short period of practice when a child is somewhat older will yield as much competence as a longer period of practice begun when the child was younger. Studies bearing on this point have covered such performances as playing with blocks, stair-climbing, buttoning, and cutting with scissors.[4]

The fact that added maturity may bring an increased capacity to profit from practice has been noted also in connection with studies of certain intellectual operations including early language development (Strayer, 1930); ability to memorize numbers (Gates, 1928);

[4] See studies by Gesell and Thompson (1929), Gates and Taylor (1926), and Hilgard (1932, 1933).

and the ability of children at the later elementary level to master certain ideas and meanings relating to the concept of historical time (Pistor, 1940).

In a study by Benezet (1935) it was found that children whose formal training in arithmetic was postponed to the sixth grade rapidly gained as much competence as children who had struggled with formal arithmetic in earlier grades. The finding that the factor of growth is important in determining readiness to learn school subjects has been emphasized in studies by Olson (1943, 1949) and Olson and Hughes (1943, 1944).

Other studies dealing directly or indirectly with the effects of special training or with the effects of varying amounts of time spent in training have dealt with spelling (Tyler, 1939) and the social studies (Eaton, 1944).

The studies cited above indicate that an opportunity for concentrated practice of a performance is not a substitute for the changes that come with growth and such practice as a child receives incidentally in the course of his everyday life.

The effects of maturing, as distinguished simply from an opportunity to practice or to learn, appear also in the development of social and emotional behavior. Studies dealing with these topics are mentioned in later chapters.

Nature and Quality of Learning in Relation to Maturity Level

The influence of the child's level of maturity is revealed not only by the fact that he can or cannot profit from practice or can learn much or little at a particular time; the influence is seen also in the nature or quality of what he learns. Before a child can walk, he can learn to play ball—but only the kind of ball play of which a child at that level of development is capable. A child who is still in the creeping stage can learn to climb, but his climbing is the climbing of a creeper (McGraw, 1935); that is, he tends to push himself upward and forward by gripping with his toes. Accordingly, some skills learned at one level of maturity may need to be re-

learned, to a certain degree at least, when a child, after a period of disuse, tries to perform them again, but this does not hold true to the same extent for all skills, as shown in the following illustrations.

In a study by McGraw (1939) a pair of twins had experiences with roller skating, tricycling, and other activities before the age of two years. A further study was made of the children at the age of six years, about four years after the termination of the main experiment. Both children maintained their proficiency in riding a tricycle. As neither had a tricycle at home, this suggests that this type of skill does not deteriorate materially with disuse, although it could not be determined how much practice the children might have had on borrowed wheels; moreover, a normal six-year-old masters a tricycle quickly, even if he has never ridden one before. In contrast, proficiency in roller skating deteriorated after the practice period. Partly by reason of changes in bodily proportions as they grew older (including relatively longer length of legs and a shift in the center of gravity), the children who had learned to roller-skate when they were about two years old or younger had difficulty in maintaining their balance on roller skates when they tried roller skating at the age of six. It appeared that a gross motor skill adapted to the bodily structure of a toddler did not carry over entirely to a later stage when bodily proportions were different, and that intervening practice (which these children did not receive, except on brief occasions) was necessary to adapt the performance to progressive bodily changes and to maintain it at a high level. In climbing up a steep slope the child whose training began earlier remained superior to his brother, but as the children grew older, both had difficulty in managing their longer legs. On the other hand, there was not a similar loss in proficiency in getting off a pedestal and in descending a slide; in these activities, structural changes in the body apparently did not require substantial readjustments in mode of performance.

We shall have occasion throughout later sections of this book to give other illustrations and to point out implications of this matter of readiness.

Varying Timeliness in Relation to Maturity

Findings dealing with the subject of readiness to learn in relation to maturity have indicated, as one would expect, that a youngster at a certain level may be unready for the learning of one form of activity and ripe and ready for the learning of another activity. In one study (McGraw, 1935) it was found, for example, that a child was able to make phenomenal progress in learning how to roller-skate, beginning when he was little more than a year old; but it was not until many months later that he was able to make progress in learning to propel a tricycle. Two studies (Jersild, 1932, and Updegraff, Heiliger, and Learned, 1937) have shown that children of preschool age are able to make spectacular gains in the singing of tones, intervals, and phrases, while, on the other hand, at the same age level, children have been found to make little or no gain in keeping exact time to music while walking or beating time with their hands (Christiansen, 1938, and Jersild and Bienstock, 1935).

These examples of learnings that can be undertaken with profit at an early age are limited, yet they are very suggestive. The idea back of an inquiry into the timeliness of learning in relation to maturity is definitely not to encourage a policy of simply standing by on the theory that anything children might learn now could be learned much better if we waited until they were more mature. Actually, a child is occupied with the business of learning during most of his waking life. If he is not being compelled to learn one thing, he is likely, on his own accord, to be busy with something else. But there are many forms of learning that he cannot undertake unless equipment, facilities, and some encouragement (as, for instance, the example set by another person) are provided.

Unfortunately, the data in the study of children do not begin to provide a complete answer to what are the most timely learning situations at different maturity levels. Ordinary observation suggests that tremendous potentialities for learning and tremendous resources for achievement and enjoyment are being neglected and wasted. Nearly all human beings have voices and are able to sing, yet only

a small proportion use and cultivate their voices in such a way as to get use and enjoyment out of singing during childhood or adult years. Large numbers of persons could learn to obtain enjoyment in various other arts, such as the playing of musical instruments, dancing, painting, and sculpture; but in a large proportion of cases resources and potentialities of this sort are not cultivated. It appears also from ordinary observation that many persons, during childhood and adult years, are unable to execute or enjoy a variety of performances—such as skating, swimming, operations involved in the use of machines and tools, performances involved in various kinds of play and recreation that are suitable for all maturity levels—because they did not have the opportunity or incentive to learn when they were children. In order to provide opportunity and incentive, it is not necessary simply to supply equipment and such facilities as skates and musical instruments. It is quite as important to release time and energy that may be spent inefficiently in learning other things. Such findings as these have tremendous implications for the child's training at home and at school. At home there is no point in trying to "teach" a child until he is ready to walk or to climb or to handle a fork or to do things in a hurry, or to be tidy, or to make a fine distinction between what is true and what isn't, to pronounces his "th's" correctly, or to do a hundred and one other things. Similarly, in school it is a waste of effort and resources to devote a vast amount of time to the teaching of academic skills to a young child if the same amount of proficiency could be achieved through a very short period of teaching when the child is somewhat more mature.

Unfortunately. studies dealing with the question of the maturity level at which it would be most timely and strategic for a child to learn the countless things that he eventually must learn at home or at school are too limited to make it possible to outline all the details of the educational program of a normal child if this program were scaled to the child's maturing capacities. However, such data as are available indicate that very important changes in what we expect of a child at home and in school, and very great improvements in the range of accomplishments that children could learn

to master and enjoy, would occur if the entire educational program were examined from this point of view.

In the school, especially, there is a need for a drastic review of the expectations placed upon children. Vast numbers of children so often are required to struggle with academic assignments which they either are not ready for or for which they cannot find any earthly use in the economy of their own lives. In the case of large numbers of children, the school seems to stifle rather than to cultivate curiosity and a desire to learn.

The Role and Conditions of Learning

The conditions through which a child realizes his potentialities include a process of learning.

It is through learning that the growing child acquires competence in using his resources for doing, thinking, and feeling, and establishes his unique selfhood.

The more learning opportunities and requirements are adjusted to the process of maturation (discussed above), the more effective and wholesome the learning is likely to be.

Learning is influenced, and in many ways limited, by provisions in the external environment. But significant aspects of learning consist not only in a process of adapting to external circumstances but in a process of inner organization. The process of integration of learning into the personality takes place inwardly and cannot be achieved solely by external manipulation. To help a child to realize himself, opportunities for learning must be provided not alone in the manual, motor, and intellectual skills but also in the sphere of feeling and emotion, since a child comes into active possession of his emotional resources through a process of learning just as much as it is true in other areas of experience.

In addition to its importance in its own right, emotion may also be an aid or a hindrance to learning. Granted a proper level of ability, failure to learn is probably more often due to the learner's attitudes than to shortcomings in the particular mechanical methods that are used in giving instruction. The problem is more personal than pedagogical.

Other Principles of Development

"Wholeheartedness and Gradation" [5]

The tendency to put a growing power to use frequently means that a child will be intensely absorbed for a time by any new mode of behavior or phase of development. In trying out a new-found performance or experience, the child may seem to an observer to exaggerate or overdo. He may be so engrossed that other things are neglected. When the child, for example, first knows the thrill of walking, he may throw himself into the act even when he is tired or hungry. He may demand to be fed on his feet or he may find it almost impossible to sit down long enough to finish a meal.

Examples of this tendency may be seen in other aspects of a child's development during infancy as well as in later periods. Now in this experience, now in that, the child tends to go "all out" in his enthusiasm. Then, as time passes, what was new and absorbing tends to lose its separate fascination, and becomes a feature of the large context of behavior.

The child's wholeheartedness in new ventures sometimes becomes trying to an adult, especially if the adult has forgotten the thrill he himself derived as a child from trying new forms of experience.

Developmental Revision of Habits

At every level of maturity children show forms of behavior which they will change or abandon in their own good time. At a given level of his development a child may use a certain way of behavior over and over again, but this does not necessarily mean that he will carry this way of behavior into a later stage of his growth. Repetition of behavior that is suited to a certain level of maturity does not necessarily establish a habit that will carry over to a later level. This is in keeping with other principles that we have noted above, including the observation that a child tends to do the best with what he has. The young infant sucks; later he bites and chews. Exercise of the grasp reflex, over and over again, does not fix the reflex forever. The

[5] The wording is from H. L. Hollingworth (1927).

child creeps, but later he walks and runs. The fact that he has assiduously practiced creeping does not mean that he will creep his way through life.[6]

Similarly, in his early language development the child has difficulty in articulating or pronouncing many words, but "muvver," even though repeated again and again, becomes "mother," and "dat" becomes "that." The child who at nine years was addicted to certain radio programs may at twelve years be very disapproving of these. The fact that a child misspells a word in the third grade and does so frequently does not mean that he has acquired the habit for good. Without special teaching, children through their own discovery revise their spelling of a large number of words. Again, the fact that a child flits from one activity to another does not mean that he is acquiring a habit that will bar him from being able to give sustained effort to a project when he is ten, fifteen, or twenty years old.

Parents often do not see a child's behavior in the light of the child's present age and stage of life but see this same behavior as though it were projected on to a later age, and this makes them feel anxious. If a person at twenty-five showed some of the childishness he showed at the age of five he would indeed be a sorry spectacle and an unhappy creature. And so a parent may go almost into a panic at the thought of this possibility, not realizing that the child himself will change in his own good time.

As a child's abilities mature, and as he becomes capable of new and different interests, he will not only revise, but completely reverse, many of his earlier forms of behavior. The youngster who awoke at an ungodly hour in the morning at three years may be hard to rout out of bed at ten. The child who was unkempt at ten years may become, if anything, too much of a dandy at eighteen years.

This process of revision of behavior does not, of course, always work in the direction of greater virtue or conformity. The child who is quite confiding at six years is likely to be relatively uncommunicative at the age of ten or fifteen years if his development has been

[6] Examples of changes in reflex behavior are given in Chapter Three.

normal. The four-year-old who begs to wash the dishes may vigorously protest against this chore when he is older.

This phenomenon, which we have here called *the developmental revision of habits*, has an important practical implication in the rearing of children. Parents would be spared much worry and children much bother if it were generally realized that many forms of behavior will be abandoned by the child himself in his own good time. While this is true, it also unfortunately is true that we do not precisely know all the forms of behavior that fall in this category or just when it might be well to help to push the process of revision.

Persistence of Archaic Behavior Trends

Although the process of development involves a revision of behavior, it sometimes happens also that the youngster, instead of changing, retains an older way of behaving even though a newer way would be more appropriate. When this occurs we have the phenomenon of *persistence of archaic behavior tendencies*. These may range from mildly bad habits to complex behavior patterns that disturb the child's entire personality. A child at the age of six or eight, for example, may show many forms of dependence on others that were quite appropriate at the age of three or four. By virtue of overprotection or some other misfortune, he may retain not only a habit but also an attitude of dependency, and he may shrink even from an effort to strike out for himself. Again, a child who lives for a time in an environment in which he is mistreated may continue, even when his lot improves, to react to others with a certain amount of defensiveness and suspicion. In his dealings with his siblings or peers, he may acquire very strong competitive tendencies which he will carry into situations that do not call for competitive behavior.

When behavior thus persists beyond its proper season, it usually means trouble. The child who shows immature dependency on others may build up an elaborate system of wiles, ruses, and rationalizations to support his dependency. In an older person such behavior may even be rationalized to such an extent that the individual refuses or is unable to see his weakness.

At the adult level much that seems curious or queer and irrational

in a person's conduct illustrates the principle that a childish form of behavior may persist beyond its appropriate time. This principle also helps to account for the fact that development may be quite uneven, in the sense that a person may be mature in some respects but quite immature in other respects. For example, in dealing with impersonal problems an adult may use a mature form of reasoning such as one expects only in a person aged twenty or more, but in his personal relationships he may show a streak of jealousy, for example, such as one might expect to find in a four-year-old child.

Anticipation

Much that we see in a child at a particular time represents not only something that has utility for the present but something that prepares for things to come. This fact is mentioned in another chapter, where we call attention to the "forehandedness of development." Development at any particular phase or stage of growth has an eye to the future.

Recognition of this fact makes it easier to understand and to accept much that we see in a child at any given time. Viewed in this light, for example, the two-year-old's efforts to be independent and to assert himself become something more than wanton stubbornness. Already at two, the child is working toward the day when he, as an adult, will have to stand on his own feet and pull his own load.

Apart from behavior which anticipates developments that will be a long time in the making, the child sometimes shows little flashes of what is soon to be. He may walk a step or two, for example, or say a word or two, and then days or weeks may go by before he repeats or enlarges upon the performance.

It does not follow, however, that everything a child manifests at a given time is pointed toward developments that lie ahead. He also, in various ways, shows vestiges of the past. For many months after birth the infant's posture, notably during sleep, reflects the position of a child in the womb. In his behavior throughout childhood he may not only retain an infantile form of behavior, as noted above, but he may revert to behavior which he earlier had abandoned for

a time. Such recurrence of "infantile" behavior may be a temporary lapse, as when a child who has had good bladder control wets himself under the stress of an exciting happening. It may also take a more serious form, as when a child over a long period is babyish and demands such attention as he actually required at an earlier time.

CHAPTER THREE

Beginnings of Behavior and Personal Experience

The development of behavior begins long before the child is born and well in advance of the time when the mother first begins to detect his movements at about four-and-a-half months after he was conceived. By the end of the second month the child can be recognized as human in form. Well before this, some bodily activity has begun. By the end of the third week the heart has begun to beat. By the end of the twenty-fifth week the child is equipped with practically all the activities basic to life as a separate creature although most of them, if not all, require further maturation (Hooker, 1943).

In this chapter we shall notice some of the developments that take place before the child is born, and we shall consider his characteristics in the early phases of his development.

Behavior Before Birth

As noted above, the child's internal organs become capable of functioning early in his fetal life. Movements involving muscles other than those of the internal organs also appear quite early in the life of the fetus. In a study by Hooker (1943) it was observed that a fetus at about eight-and-a-half weeks reacted, for example, when stroked with a hair in the region of the mouth.

During the third month of fetal life, and increasingly thereafter, responses that involve the transmission of nerve impulses from one part of the body to another have been observed.

The developments that take place before birth illustrate strikingly

what might be called "the forehandedness of development." The capacity for many functions is established well in advance of the time when normally there is a need to use these functions. The mechanisms for sucking and for breathing, for example, are relatively well developed several months before a full-term baby would be called upon to suck or to breathe. One result of this forehandedness is that even though babies normally are born about 280 days after conception, it is possible for a child to survive after having spent only about 180 days in the mother's body. Claims have even been made that younger fetuses have survived.

This tendency to anticipate future activities and future needs quite long in advance appears also in developments that occur after birth.

Direction of Early Development

It has been noted that development before birth tends to proceed in a *cephalocaudal* direction (Scammon and Calkins, 1929)—that is, growth and differentiation progress from the head to the tail region. During the earlier stages of growth, development in the head region is far in advance of development in the posterior part of the body. This does not mean, of course, that development is complete at one end before it begins at the other. Illustrating this trend in development on the physical side is the fact that the head is well developed before the legs assume their final form and that the arms are budding before leg buds appear. Analogous to this, after the child is born, is the fact that a child can make good use of his arms and hands in reaching and grasping before he can use his legs in standing and walking.

In the development of segments of the body, there is a parallel to this cephalocaudal trend in the body as a whole. Development is in a *proximo-distal* direction: The structures that lie nearest the main axis of the body mature earlier than those that are more remote. Again, after birth, we see a behavior trend analogous to this in the fact, for example, that control of gross movements of the arms and forearm comes at an earlier time than does control of the wrist and fingers.

Activity Before Birth

Activity of the unborn child rises to a peak between the eighth and ninth month (Richards, *et al.*, 1938). Much of the movement of the unborn child seems to be in response to internal conditions, but it is possible also sometimes to provoke movement by external means. One observer noted, for example, that a kick and other movements were exhibited by a child (thirty-one days before birth) when the sides of the bathtub in which the mother was lying were struck with a metal rod (Forbes and Forbes, 1927). During late stages of pregnancy, mothers have also reported that a musical concert may lead to increased fetal activity.

Conditions in the daily life of the mother may likewise lead to greater than normal amounts of fetal activity (Sontag and Richards, 1938). There may be more fetal movement during periods of severe emotion than during moments of calm. Mothers have reported that they experience more feeling of fetal activity when they are fatigued than when they are rested, although this may be due to greater sensitivity on the mother's part. Changes have also been noted in the fetal heart rate. In some instances, the rate has been found to be higher after the mother had climbed a flight of stairs than some minutes later, and higher after she had smoked a cigarette than just before or some time later; however, such an increase does not always appear, and there are large individual variations.[1]

The fact that movements of the fetus have been found to vary under different circumstances and that they might be influenced, to some extent, both by the general condition of the mother and by the mother's response to external stimuli, opens quite a field for speculation.

Can circumstances in the environment in which a child lives before birth influence his character and disposition and the later course of his development? Through the centuries there have been many superstitions and some theories bearing on this. There have

[1] Other studies by Sontag and his associates dealing with fetal behavior include Sontag and Wallace (1934, 1935).

been tales about prenatal influences, such as the notion that if a pregnant woman is frightened by a rabbit her child later will show a birthmark in the shape of a rabbit's foot. There also have been extreme theories to the effect that the unborn child is able to respond to "psychic" influences in the sense that he can feel whether he is wanted or unwanted by his mother.

If such views are true we must assume the influence of the mother on the child is carried through channels that we now do not know of. Before birth, and even at the time when he is born, the child's nervous system is not fully developed. Besides, even if it were capable of functioning in a mature fashion, there is no medium through which the psychological state of the mother can be communicated directly to the child. But it is possible that effects connected with the mother's psychological condition might be communicated indirectly. When a mother is emotionally excited or disturbed there may, for example, be secretions from the ductless glands into her blood stream, and these hormone substances may also be carried to the child in the fluid interchange between mother and child. It is conceivable then that the unborn child might indirectly through chemical means be affected by conditions affecting the mother. In studies by Sontag and his associates it has been observed that fetuses show a greater than usual amount of activity when mothers are undergoing severe emotional stress.[2]

One theory about this is that by the time a child is born he may have a predisposition toward neurotic irritability centering in the gastrointestinal tract.[3]

Due to the many hereditary, prenatal, and congenital factors that might influence a child, and in view of the protection with which nature surrounds the unborn child, it would be difficult to get con-

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[2] See Sontag (1944a, 1944b), and Sontag, Pyle, and Cape (1935).

[3] For references dealing with prenatal behavior and on the possible effects of prenatal conditions and of conditions accompanying birth and on the later characteristics of the child see earlier references, and also Sontag (1941), Despert (1946), Greenacre (1945), Pearson (1931), Preyer (1937), Ruja (1948), Senn (1947), Wile and Davis (1941). Studies have also been made to find whether the unborn child is able to "learn"; the results have been inconclusive. See for example, Ray (1932).

clusive evidence of a definite cause and effect relationship in this line of study.

Organization of Behavior

What is the nature of the process by which new forms of behavior emerge as development goes on after birth? Discussions of this subject have been based largely on observations of the development of behavior in lower animals because of difficulties in making observations of human beings at various known stages of prenatal growth. On the basis of observations of amblystoma (a salamander), Coghill (1929, 1936) some years ago took the position that the development does not take place through a knitting together of separate movements in this or that segment of the body but that reactions of the total organism precede separate movements of parts of the body. The primary state is one of integration, and partial movements become individuated out of this preceding total. Swimming movements in the salamander, for example, are movements involving the whole body. Movements of the individual limbs are tied in with, and are an integral feature of movement of, the body as a whole before separate or independent movements of the limbs are possible.

In like manner, Coghill says that the act of seeing involves at first a total bodily response. As an object moves from left to right through the animal's field of vision, the animal does not sit like a sphinx with roving eyes that can follow the object while the rest of the body stays put. Instead, the whole organism of the young salamander participates in the act. It is not until a later stage of development that these parts can move more or less independently. (As a partial, but not entirely suitable, analogy, notice how a child at first blinks both eyes together and how, when he is older and first tries to wink one eye, movements of the other eyelid also occur at first and his head may bob up and down and there may even be movement of the shoulders and trunk.)

Coghill implies that these observations of the salamander and other lower animals hold true for animals in general as well as for man. On this point, however, investigators do not agree. In

experiments by Carmichael and others[4] with the fetuses of mammals, it has not been found that all observed movements conform to the concept of a gradually expanding total pattern, completely integrated from the beginning. While a process of individuation of specific movements out of previously larger activities accounts for much that occurs in the development of behavior, a full description would have to go many steps further. Various activities are differentiated at different rates. New relationships between some specific responses are established before specialization has gone far in other activities.

The full story would also have to take account of the development of behavior as it finally takes form after birth, when various movements and muscle groups are organized in countless ways in the thousand-and-one skills that the child eventually acquires. The development of behavior after birth occurs through both a refinement and increasing specialization of specific movements as well as a tying together of movement systems that were not integrated at the start.

Behavior at Birth

Generalized movement. Although there are many more or less clearly defined acts in the flow of the newborn infant's activity, an outstanding feature of his early behavior is a vast amount of diffuse and seemingly uncoordinated movement.[5] Such movements, at times, during waking moments are so rapid and varied that an observer is unable to observe them in detail. The infant thrashes about with his arms and legs, and sometimes every part of his body seems to be active at once, with little or no coordination between the various members.

In these activities the infant is less specialized and precise in his movements than he will be in time. Even in connection with apparently simple reflex activities, or in response to stimuli applied to a limited area of the body, there may be a variety of associated

[4] For a review of studies in this area see Carmichael's (1946) chapter in the *Manual of Child Psychology*. A revision of this *Manual* will be available in 1954.

[5] See Irwin (1930 and 1932), and Shirley (1931). For a review of studies of the newborn child, see Pratt (1946 and 1954).

movements in other parts of the body. For example, when an object is brought into contact with the infant's mouth, he is likely to begin to suck, but he may also show many additional movements in other parts of his body that don't seem to have much to do with sucking. Some activities may be elicited by happenings that seemingly have little bearing on the act that is produced (Pratt, Nelson, and Sun, 1930). Thus one investigator noted that infants made sucking movements when their hair was pulled, when they were dropped, and when someone pinched their big toes (Jensen, 1932).

The state of affairs here described does not mean that the infant's responses are so unorganized that his movements are quite unsuitable. Even though a pinch of the toe may produce sucking movements, and even though sucking in a response to a contact with the mouth may be accompanied by movements of the leg, there still is method in this seeming madness. Offer the healthy child a nipple when he is hungry and he will do a fine job of sucking, regardless of other activities that may accompany it. Pinch his toe, and his response is likely to be more pronounced in the limb that is pinched than in more remote areas of the body. In other words, even though the child exhibits a great deal of generalized movement, there is some specialization of behavior from the beginning.

It is possible to detect quite a repertory of accomplishments in the general flow of his activity. He sucks, swallows, excretes, defecates, vomits, salivates, hiccoughs, sneezes, yawns, stretches, kicks, waves arms and legs, trembles, shivers, turns his head, grimaces, moves his eyes, blinks, cries, grunts, and sighs. He can meet the world more than halfway in his ability to make his presence known. He exhibits also a large array of additional reflexes.

Reflex action. The term "reflex" has been used to designate an involuntary reaction that is not learned but occurs by virtue of an inborn stimulus-response connection. The term also implies a rather specific and fixed reaction. Actually, however, some responses that are labeled as reflexes are somewhat less fixed and specific when they are first exhibited by the newborn child than they are with the passage of time.[6] Sucking, for example, is a response that is

[6] For a discussion of studies dealing with this topic, see Anderson (1936a).

ready for business when the child is born. Even so, as we have seen, sucking may be set off by happenings that have nothing to do with feeding. Moreover, even the act of sucking, as such, changes and becomes more efficient during the days following birth (Gesell and Ilg, 1937).

In the course of development some reflex activities wane, or are displaced by other forms of behavior. As the child's nervous system matures it becomes possible for him to check or inhibit some movements that occurred at first as reflex actions. One reflex that shows an interesting course is the Moro *Umklammerungs*, or clasping or embrace reflex (Freudenberg, 1921). This reflex may be elicited by striking a sharp blow on the surface on which a child is lying on his back. The infant throws out his arms and then brings them together as if in an embrace. At the same time, the legs are thrown out and then flexed. This reaction was believed by its discoverer to be an atavistic or primitive fright reaction in response to the jarring of the body. In a primate, such movements of the young creature's limbs might enable him to grab hold of his mother's body or the limb of a tree. One investigator (Schaltenbrand, 1925) terms it a "readiness-to-jump reaction, ensuring a safe landing." This reflex undergoes changes during the first months of life. In a study of the Moro reflex in a number of infants (McGraw, 1937) it was found that at about three or four months the gross movements had diminished considerably. At about seven months, overt movements had further waned, so that practically all that was exhibited was a weak, body jerk accompanied by blinking. The changes from the more massive to the more refined and subdued response, according to McGraw, parallels certain developments in the infant's nervous system. According to this account, the cerebral cortex is not functioning in the first phase of the response. As the cortex develops and comes more and more into action, the response becomes more restrained, so to speak. A primitive kind of movement over which the infant seems at first to have little or no control gives way to a more calculated act.

The grasp reflex, which occurs when an object is brought into contact with the palms of the hands of a young infant, also changes

with time. This grasp may be so powerful at first that the infant can cling to a bar as it is lifted into the air and support his own weight for many seconds. The strength of the reflex seems to be greatest when the infant is excited or crying and is least when asleep (Sherman, *et al.*, 1936). But this act of grasping, which seems involuntary at first, vanishes as the child matures and becomes increasingly capable of voluntary control of the movements of his hands.

Reflexes that look like a kind of locomotion also appear for a time and then seem to wane. If placed prone on a hard surface, or if stimulated on the sole of the foot, the newborn infant will sometimes make crawling or swimming movements as though he were making apparent effort to propel himself forward. He will make swimming movements if placed in a tank of water. If held upright, with feet touching a table or hard surface, he will make "stepping" or "dancing" movements (Shirley, 1931). These reflexes of locomotion wane within a few weeks after birth and seem to have no immediate relationship to the later stages of learning to crawl, creep, stand, and walk.

Special Senses

The question as to what impressions the newborn child receives is a difficult one to answer, yet any sign that he can see, hear, smell, and taste gives a glimpse of what the content of his early experiences might be. The infant's response must be judged by observation of what he overtly does, and what he does is complicated by the fact that his early behavior will be influenced by many conditions, such as being wet or dry, hungry or sated, asleep or awake, and other circumstances.

There also is the problem of how to adjust observations of the child to his own ways. The immature infant is unable to do much to cooperate, so it becomes the observer's job to cooperate with the infant. Suggestive in this connection is a study dealing with infants' ability to fix their gaze upon an object and follow it with their eyes as it moves about (Beasley, 1933). One procedure might be to make conditions constant by approaching all children, at all times,

in the same manner, holding the light at a given distance and at a given angle, and then moving it around in the field of vision always over the same path, at the same speed, and so on. Such a procedure might be quite correct from a mechanical point of view and yet fail completely to tap the child's possibilities. Another approach, used in the study here in question, is to try to meet the infant at least halfway by trying, so to speak, to establish contact with him, and by trying to fall into pace with the child. The investigator first moved his stimulus (a light, or a small cylinder, or the experimenter's fingers) into the child's line of vision until he found the point at which the child's eyes seemed to be fixed upon it. This point varied considerably with different infants. Only after fixation had thus been procured did the experimenter proceed with the next step of finding how far and how long the infant would continue to keep his eyes on the object as it was moved about in the field of vision. The results indicate that during the first few days of life children were more capable of following a visual stimulus than would have been the case if more arbitrary experimental procedures had been used.

Sight. Almost from the time of birth the average infant responds as though he can see. When an infant is able to fix his eyes on an object and follow it with his eyes as it moves through space, it is reasonable to infer that he is seeing or obtaining glimpses of one sort or another, although we have no way of knowing just what kind of impression he has. Infants vary considerably in their apparent ability to fix their eyes on an object and in some children, for a time after birth, movements of the eyes are not coordinated. Not until many weeks after birth are eye coordinations fully established in fixating and pursuing an object that moves up and down or from side to side in the field of vision.

Hearing. A child even before birth may be responsive to the physical vibrations that produce sound, but it cannot be surmised from this just what the child hears. Some investigators have claimed that infants are deaf at birth, but in many studies it has been found that a majority of babies respond in one manner or another to sounds within the first days of life. There are wide variations between

individual children. When an infant does seem to be insensitive to auditory stimuli, this condition may mean that the ears are obstructed or that there are physical imperfections in the organs of hearing at the time of birth.

Other sensory responses. As indicated by the amount of sucking and the facial and bodily reactions of various types, it has been found that although the average baby reacts the same to mother's milk as to cow's milk, he responds positively to milk *per se* and to sweet solutions, and gives a negative response to solutions that are strongly salt, sour, or bitter (Pratt, *et al.*, 1930).[7]

One interesting observation in studies of the sense of taste in newborn infants is that when babies have just been fed they are likely to make finer taste discriminations than when they are very hungry (Jensen, 1932). We notice the same thing in older children and in adults—the hungrier a person is the less fussy he is likely to be about the taste of his food. But this observation that even during the first weeks of life children are discriminating in this way adds to the difficulty of studying their capacities. If a child is not hungry, he may reject both something sweet and something sour not because he cannot taste the difference but because he desires neither. Earlier we noted that if an investigator takes pains to "catch" an infant's eye he may place a far higher estimate on the infant's visual abilities than if he simply barges in upon the child with a meticulous attention to all experimental variables except the child's own preoccupations at the moment.

In carefully conducted studies of the infant's sense of smell, it has been found that such odors as ammonia and acetic acid, which are powerful enough to cause discomfort to adults (perhaps by virtue of pain rather than olfactory stimulation), also produce reactions in newborn infants, while milder odors, which adults are able to detect, appear to have little effect. Infants react to temperatures that are hotter or colder than the normal temperature of the body, and they appear to react more to extremes of cold than to extremes of heat (Pratt, *et al.*, 1930). Incidentally, it may be noted that the matter of temperature regulation at birth is complicated by

[7] For reviews of studies in this area, see Pratt (1946 and 1954).

the fact that the surface area is larger per unit of total bodily weight in the infant than in the adult.

From the time of birth infants are responsive to the stimulus of pressure or contact. During the first days of life infants also show a variety of responses to changes in their bodily positions. Righting responses of a sort that are eventually involved in maintaining an upright posture can be observed during the first days of life.

The Emotions of the Newborn Child

What capacity for feeling and emotion does an infant have during the first days and weeks of life? This is a difficult question yet it is a crucial one, for while a person's awareness of his existence comes partly through the sensory experiences—sight, sound, touch, and other sensations—feelings comprise an essential element in his awareness of himself. Feelings are, in many ways, the most intimate, the most personal and significant components in the flow of experiences in the inner world that makes up what one calls oneself. Sooner or later, feelings come into play in the young child's life as a most important element in his existence. But how soon? [8] As we seek to follow the development of the child's mental life, it is just as important (and probably more) to inquire into what may be the nature of his feelings as to ask what kinds of sensory experiences he is capable of, and as he grows older it is as important (and in some ways more important) to inquire into his emotions as to inquire into his thoughts. But the importance of the topic does not make it any easier. When we ask what are the feelings of the newborn child and of the infant during the first few days and weeks of life the answer is: We simply don't know. We can only conjecture. And there has been much conjecturing. As a matter of fact, one cannot be with an infant without speculating on this question, for

[8] Feeling, according to this view, is the quality which gives an experience or an awareness of an external event its peculiar *personal* quality. The same external or objective happening, with the same measurable properties, has vastly different subjective meanings when feelings come into play. The same sight or sound, the same ten-dollar bill, or the same smile may to one man mean a jubilant fulfillment of hope, to another a reminder of failure.

from an early age, most infants (even the serene ones) manifest what seems to be a great deal of emotion. They cry, squirm, wiggle, kick, and thresh about in a manner which can easily be interpreted as signs of great excitement or distress. If an adult were so animated we would have to assume that he was agitated by severe emotion. It is easy for an adult to read into the infant the emotion he imagines he himself would experience if he lay there, squirming, kicking, and crying, in the child's place.

On this subject as to what the child might feel there have been many opinions, and there has also been a great amount of research, but unfortunately, both the opinions and the research leave large question marks.

The view that the young infant is subject to profound emotional experiences has been set forth by Freud, and many of his followers have elaborated upon this view.[9] Freud speaks, among other matters, of the infant's helplessness as a factor that brings into being the first situation of danger and creates a need to be loved, which the human being is destined never to renounce. Issacs (1933) maintains that wants and wishes, fears and angers, love and hate are there from the beginning. According to Despert (1946), a child comes into the world lonely, and he is afraid.

As against these views, there are findings which indicate that the child is just as unfinished as far as capacity for emotional experience is concerned as he is in other respects. We shall look later at some of these findings. But why raise the question in the first place, if the findings are so inconclusive? The answer is twofold: First, to look at some of the opinions and findings that have emerged may sharpen our ability to look for signs of emotional behavior in our own approach to young infants. Second, the answer we give, even tentatively, to questions concerning the emotions of the infant are significant from the point of view of the adults who have relationships with young children. The adults' attitudes are important. If it is assumed, for example (whether rightly or not), that the infant is a highly emotional creature, who may be bruised and branded, hurt, aggrieved, terrified in ways that might blemish him for life, we

[9] See, e.g., Freud (1936), Issacs (1936), and Sharpe (1950).

immediately place a great responsibility on adults who care for him. When a parent is told that infants are extremely susceptible emotionally he may become anxious about his relationships with his own little baby at home or feel guilty about what he has done or left undone with his older children when they were small. The idea that a young infant is capable of intense emotional experience may have the effect not only of making parents feel guilty about what they have done but also anxious and hesitant about what they might do. Views on this subject make a great difference in what parents expect of themselves and blame themselves for. On the other hand, if it is assumed that the child's manifestations of emotion (as when he cries when hungry or when apparently he wants company) do not really mean that he is as disturbed as he sounds, the practical implication is that we might as well ("for his own good") leave him to cry it out. If a child's manifestation of emotion really doesn't mean much (or if we so assume), it may make a great difference in how he is cared for.

We cannot *prove* that the child during the first few days after birth is or is not capable of intense emotional experience such as we would assume, from outward behavior, if an older person behaved as he did. Then what is the implication? As a matter of personal judgment, the writer takes this position: For two reasons, it is far better to lean too far (than objective proof might warrant) in the direction of assuming that the child *is* capable of varied emotional experience than to lean in the other direction. First, if one gives heed to a child's cries and his other expressions of emotion by going to him, caring for him, comforting him, probably no harm will be done, and there is at least a likelihood that good will be done and a possibility that harm might be done by *not* giving heed. Better to lean on the side of solicitude and compassion. Second, it is only on the assumption that maybe the child does feel, and on the assumption that one can learn to detect something of the emotion that he is experiencing and seeking to communicate, that we can be alert to his feelings, learn the signs of emotion, learn to feel with him, and have a kind of communication with him. If we as-

sume in advance that there is nothing, we are more likely to notice nothing.

But what here is said does not pertain alone to relationships with young infants. It applies to relationships with children at all age levels, and with adults. The broad principle is that the more we seek to respond to the humanity of others and to draw upon our own humanity, the more alert we shall be to the feelings of others and to feelings within ourselves. So we are not here considering a special rule that applies to early infancy but an approach that has implications for psychological understanding at all ages. And probably this is also the answer to the question of guilt that was raised above. It is likely, as mentioned there, that a parent may be more apprehensive if he is told that his young infant is capable of intense and profound feeling, and he may feel guilty when he looks over his conduct as a parent with his older children as infants. But the problem is not a special problem of infancy, for the more the parent is able to enter into emotional relationships with others, the more healthy his relationships with his child or with himself are likely to be and the less likely it is that he will have irrational and futile guilt feelings about what is past—whatever may be the mistakes he thinks he may have made. In other words, from the point of view of psychological significance, the question of what are the emotional capacities of the young infant is intertwined with the question of what is the emotional capacity of the adults who have him in their care. In case of doubt or misgivings, if there are practical problems pertaining to this matter, it probably will be just as important for the parents to try to learn more about themselves as to plow through the literature in an effort to learn more about the child.

Hunger

The newborn child shows his hunger by means of cries and restless movements. When fed, he tends to quiet down. Healthy babies demand food about every three hours, but there is wide variation from child to child.

If the child is not fed when he announces his hunger, his crying

and activity are likely to increase. Similarly, if a youngster has been fed on a regular schedule for several days after birth and his feeding is then delayed beyond the usual time there likewise is likely to be a sharp increase in crying, fussing, and general activity.

What are the feelings associated with this cycle of hunger and the satisfying of hunger? There are times when a baby will cry as though his innermost being were in torment. Is he perhaps swept by vague fear of annihilation because his need for food is not satisfied? Is he perhaps consumed with rage because his desires are not being met? Do the softer notes that appear among his more strident outcries mean that his terror and rage are blended with feelings of gloom—the gloom of one neglected by elders whose withholding of food means also the withholding of love? We cannot confidently answer yes or no to these questions. But it is obvious that the infant at times throws his whole being into his quest for food.

Experiences Involved in Personal Contacts

The experiences involved in being hungry and being fed have a relatively greater prominence in the life of the young infant than they will have later on, and the same seems to be true of the contacts with persons that occur when any of his wants are being cared for. These contacts are intimately interwoven with his well-being and his survival from day to day. Within a few days after birth, he will cease his crying, at least for a time, if only he is held in someone's arms, while earlier it required not only holding but also food to pacify him. Within a short time, likewise, he will cease fussing simply in response to the sight or sound of a person who is coming to him. Later comes a time when he wishes for someone to be near him, even though he is comfortably warm and dry and well fed, as though he desired company for its own sake.

Soon after birth infants thus seek to get attention beyond what is required for feeding and other aspects of their physical care. They want human companionship, and usually they receive it by being held in the arms, and by being spoken to, hummed to and sung to, and by being rocked, stroked, squeezed, patted and petted,

nuzzled, cuddled, and fussed over in countless ways. Acts of this sort that involve affectionate, comforting, tender, and playful contacts are known as "mothering." The infant soon after his birth craves mothering. We might argue that this desire for mothering is something secondary, something that is acquired through association with an intense satisfaction in being fed with the lifting, handling, and holding that goes with being fed. Or we might argue that the infant's desire for being mothered is something primary, representing a need that is just as primitive and unlearned as the need for food. Actually, it would not pay to stop long to debate this question for the simple fact is that whether this desire for contact and association with other human beings is something inborn or something that is learned it appears early and it is strong, and as time passes it is of decisive importance in the child's development as a person. From his crib in early infancy the child confirms the saying that it is not good for man to be alone.

Again, in connection with this matter, as in connection with hunger, we cannot tell just what is the nature of the emotional experience involved. We can only recognize that all the signs indicate that contact with another person—if not the contact, at least the presence of another—early becomes a matter of supreme importance to the infant.

With the passage of time, the child welcomes contact with a friendly parent not only as a source of apparent satisfaction in itself but also as a help in stimulating his own efforts and in bearing the hurts and bruises of everyday life. Little children often exert themselves most—in their chatter, their handling of objects, their first ventures in creeping, their first articulation of a recognizable word—when another is in physical or psychological contact with them. As the child becomes older, pain from a fall, anger from the loss of a toy, rage from having been struck by another child become easier to bear if he is picked up and is held in a parent's arms. He derives psychological support from such contacts just as he derived life and physical well-being from the body of his mother before the time of his birth.

Pain

Infants seem relatively insensitive to certain forms of pain stimulation. It is not possible to tell how soon or how deeply the infant feels pains as they are experienced by adults, but it is undoubtedly true that many of the pains of adults are more intense by reason of past experiences. If pain stimulation could be stripped of previous associations of tensions and fears that grow out of past experience, many agonies experienced by older people would, no doubt, be less severe.

It is interesting to observe how an infant's apparent insensibility to certain pains is reflected in medical practice. Circumcisions performed upon a child under two weeks of age without the use of an anaesthetic, and other forms of surgical treatment, do not customarily produce signs of suffering as acute as one would expect if an older person received similar treatment. However, we cannot be certain that absence of outward signs denotes a similar absence of feeling.

Crying

Crying is one of the most important accomplishments of the young child, and it has a vastly complex set of functions and meanings. Through his crying the child expresses his needs, his wants, his discomfort, and, in time, his desire for company, his wish to be noticed, his hurts and bruises, his annoyances, his impatience, and his grief. Crying comes to be not merely a sign of distress but a kind of self-assertion. Crying serves the child as a means of calling his friends to his side, and also very early in life (although not intentionally at first) it becomes a weapon which the infant can use as a protest against those who ignore, neglect, or abuse him.

From an early age all healthy babies cry lustily, but even in this primitive means of expression there are many marks of individuality. In similar circumstances some babies cry more than others. Often the cause of crying seems clear, but often not. In observations by Aldrich, Sung, and Knop (1945a, 1945b) it appeared that hunger

and being wet or soiled accounted for a large proportion of instances of crying; but in about a third of the instances the cause could not be ascertained by those who were watching the baby.

Children vary not only in the extent but also in the manner and style of their crying. One baby's crying tends to be sharp and staccato while another's is characteristically more smooth and connected. Some babies have rather loud cries while others use a softer kind of expression, moaning low as an adult might if he were weary or wished to weep without calling too much attention to himself.

The crying of young infants has received some attention in research studies, but there is something about it that is baffling yet fascinating. Often if one listens to the crying of young babies one hears sounds that seem to have distinct meanings and yet it is difficult to tell what these meanings might be. Here, as in connection with the study of other aspects of a young baby's behavior, the listener's interpretation will be colored by his own mood and feelings toward the child.

A child's crying often is disturbing to adults, because it arouses sympathy, or annoyance, or it reactivates buried hurts to such an extent that it is hard for adults to listen to a child's crying without being threatened by it. One who views the child in the aloof manner of a spectator probably is less likely to confuse the child's crying with feelings of his own, but he might also by virtue of his detachment fail to perceive anything. The dilemma here is that one who is genuinely interested in the child and has a fellow-feeling for him may hear too much and one who is not concerned will only hear a lot of noise.

By the time he is a few months old there appear in the crying of a child characteristic qualities of tone and rhythm and cadence which might already at this early age give a deep insight into this young person if we knew how to interpret the sound. For example, a motherless child who has been passed from hand to hand during a period of foster care, shifting again and again to strange cribs, and to unfamiliar arms, might develop a bedtime cry which seems to express a kind of protest to indicate he is resisting sleep for fear he might once more wake up in a strange place.

Absence of Clearly Defined Emotional Responses

Although the child during the first two or three weeks of life shows general excitement by way of crying and diffuse bodily activity, such behavior does not show clear-cut patterns—now of anger, now of fear. Even in an older person these patterns are none too clearly differentiated, but as a person grows older there are times when his expressions have unmistakable earmarks of anger, fear, or joy.

In research studies of emotional behavior following birth, children have been observed when exposed to conditions that might produce pain, anger, or fear. To study "anger" responses, such tactics as compressing the child's nostrils, restraining the use of his arms by pinning them to the sides of his body, interfering with the child's head movements by pressure against his chin have been used. In a majority of instances, infants who have been subjected to such treatment for brief periods during the first two or three weeks after birth have not shown anything resembling the classic picture of rage. Indeed, many infants bear treatment of this sort as though it were meant in a friendly, or at least neutral, spirit.

Before many months have passed the story will be different, of course. Physical restraint and thwarting of movement become quite effective in eliciting anger. But even when the child has become able to put on a show of anger, what constitutes restraint or interference will not depend solely on what another person does to him. If he is quiescent, or if he is in the mood, so to speak, for a little horseplay, he will allow his arms to be held to his sides for a time and he will even patiently accept the indignity of having his head pushed back by pressure on his chin. On the other hand, anger is likely to ensue if the thwarting is real from the standpoint of the child—if, for example, his arms are forcibly restrained just as he is busy in the act of using them, or if his feeding is delayed after he has seen the bottle and is all set to take his milk. Similarly, the act of placing him in his crib may elicit anger in a child who has reached the creeping stage and wants to be on the go, whereas the same act has no such effect at an earlier stage.

At birth, the infant will react with crying and restlessness to any form of intense and enduring stimulation, of which rough restraint may be one form (Dennis, 1942). At a later age the infant will react also with crying and restlessness when his accustomed ways of behaving are interfered with.

A sharp, shrill, or loud noise may cause an infant during the first days of life to start, kick, squirm, and perhaps cry. Such behavior has the appearance of fear. But other forms of stimulation, which a sympathetic adult would not regard as particularly fear-inspiring, may produce similar bodily movements and similar cries. Moreover, infants often seem undisturbed by rather drastic treatment. In one study (Irwin, 1932), each of twenty-four infants under one month of age was raised in a supine position above the experimenter's head, was dropped, and was caught after he had fallen a distance of two feet. In eighty-five trials of this sort, crying resulted only twice. In 12 per cent of the trials the infant made no detectable overt response. In half the number of instances in which the children did react to this treatment, their movements were confined to the arms alone.

From the viewpoint of emotional expression, the child's reactions during the first weeks of life group themselves roughly on the one hand as reactions of apparent withdrawal or rejection, such as squirms, twists, tension, movements of the trunk and the arms and extremities, turning of the head, and crying. On the other hand, there are reactions of apparent acceptance, quiescence, passivity, and a rudimentary form of pursuit, such as is found when the child turns his head and opens his mouth to suckle when an object is moved toward his lips. His overt behavior during the early days of his life does not show organized responses to which a particular label, such as anger, fear, or joy, can confidently be attached.

Other Functions

The newborn child's heart beats more rapidly than an older child's; his normal breathing rate is higher, and his blood pressure is lower.[10]

[10] Feldman (1920), Sontag and Richards (1938).

As noted earlier, when fed according to their own demands, infants vary considerably in their feeding rhythm but they probably will seek to be fed considerably more often than the six feedings per twenty-four hours which sometimes have been regarded as the standard (Marquis, 1941, and Simsarian and McLendon, 1942, 1945).

The average infant voids his bowels about four to five times a day and his bladder about nineteen times in twenty-four hours, but there is great variation in these matters (Halverson, 1940).

Differences in Degree of Maturity at Birth

While the average child is born approximately 280 days after he was conceived, there are wide differences, especially in the direction of shorter periods of gestation. It is difficult to obtain precise records as to the "age" of children at birth, but the age can be determined at least approximately. In addition, it is possible to apply an objective criterion, such as weight at birth; it can be assumed, for example (in order to have a fixed and arbitrary criterion), that a child weighing less than 5½ pounds at birth has been born before the full normal term of forty weeks (Scammon and Calkins, 1929).

Children at birth vary considerably in "maturity." Gesell and Amatruda (1945) have estimated that the range in age of newborn babies who are capable of living is as wide as from twenty-six to forty-six weeks. These figures indicate the vast leeway of chance and possibility within which the processes of life proceed. Although the average birth weight is a little above 7 pounds for girls, and a little under 7½ tor boys, babies have survived who weighed as little as 1½ pounds or even less (Hoffman, *et al.*, 1937). However, according to findings reviewed by Benton (1940), it is unlikely that a child weighing less than about 2½ pounds will survive, and the chances of survival increase with added weight up to 4 or 5 pounds.

Children who clearly are born well before full term are usually known as "premature" babies. This label is a useful one, but it is somewhat lacking in precision. Actually, two children may be born at exactly the same fetal age, yet one may be more "mature"—more fully developed—than the other (Blatz and Millichamp, 1937).

a child may be "premature" in the sense that he has been [illegible] the average of forty weeks and yet be more "mature" in the sense that he is more advanced in his development than another child who has been born at full term. Differences in rate of growth, which are so conspicuous after birth, appear also in growth before birth.

The "premature" child has the characteristics of an "immature" child in that he has not had time to complete the developments that normally occur between the period of his untimely delivery and the period when babies normally are born.[11] Accordingly, the younger he is, the less fully is he equipped to carry on the business of living an independent life. The more poorly equipped he is, the more help he needs: Care must be taken to keep him warm, partly because he lacks the deposits of fat that normally accumulate during the later stages of fetal growth; it may be necessary to aid his respiration by feeding him oxygen; he may need help in taking nourishment by reason of weak sucking or swallowing reflexes, or inadequacies in his digestive processes.

The premature child looks like a tired, little old man. He is so near life's beginning yet he looks as though he were near its end. If not artifically warmed, his temperature will fall, breathing cease, and the heart which has been beating steadily from the time he was about one month old will stop. He will become moribund, and death will claim him.

He is cadaverous looking, with a huge head out of proportion to the size of his body, less handsome even than a full-term baby; but who would call him ugly? Not his mother, if she has yearned for a baby, nor his father, for he will see this imperfect creature as the tentative and uncertain fulfillment of a hope.

So this child who was thrust too soon into the world is placed in an incubator, and he continues to grow. The process of maturing continues. It is almost as though he were still in his mother's womb. The incubator in which he is kept alive is a mechanical thing, but it is a kind of motherly care—one step removed. Only in a civiliza-

[11] See, e.g., studies by Davis (1952), Glaser *et al.* (1950), and Howard and Worrell (1952).

tion which values the life of every human being could it be contrived. This is a comforting thought as we [illegible] creature who has entered so young into the struggle of life are tender hands ready to care for him.[12]

The fact of being born prematurely does not enable the child to "skip a grade" in his development. If he is born at six months he has the characteristics of a six-month's fetus. "He remains faithful to his fetality, even when birth has made him an infant" (Gesell and Amatruda, 1945). However, even though he does not leap into a later phase of development, he is likely to set a faster pace in many aspects of his development from the time of his birth until the time when he normally would have been born than is set by the child who is spending this same period in his mother's womb. A healthy child who was born at six months after conception is likely three months later to be more competent and alert to his environment than a full-term baby who similarly is nine months old (from time of conception) but who has been newly born. However, the full-term baby, three months from the time of his birth (or almost twelve months from the time of conception), is likely to be quite advanced in his development as compared with a premature child born at the same date as he.

When age is calculated from time of birth, the average premature child is likely, at the start, to be backward in his development as compared with full-term children. However, the difference between them tends to diminish as time passes. The premature child tends to "catch up" (although there are exceptions, of course, especially if the child also suffers from organic defects). Investigators differ in

[12] The care shown for a premature child, and usually for newborn children in general, is inspiring. Yet it is depressing to note that human beings whose sympathies are so readily aroused by the obvious physical helplessness of an infant often are quite impervious to the less obvious signs of psychological helplessness in the same child when he is older. Ten years hence, if the tenderly cared for premature child happens, like so many other children, premature and full-term, to be having trouble at home or at school—trouble springing from the fact that he has become frightened, anxious, hostile, and bewildered in the struggle of life—he usually cannot expect the tenderness he received when he so obviously needed help as a newly born premature child. But if we could see the inner aspects of his personality, we would see that he is now as much in need of tenderness as he was when he was born.

their estimate as to when the premature child is likely to have caught up; indeed, the estimates have varied from a matter of months to a matter of several years. The process of reducing the gap between the premature and the full-term child may vary with respect to different mental and physical qualities and characteristics.

Prematurely born children eventually show much the same range of individual differences in mental and physical characteristics and in temperament and personality traits as do children born at full term. However, some investigators have maintained that certain mannerisms and characteristics are peculiar to prematurely born youngsters during the first years of life and perhaps even later. Some investigators have found that prematurely born children are relatively more advanced in "personal-social" behavior (smiling, noticing people, and so on) than in motor ability (Shirley, 1938). Again, investigators report that prematurely born children are relatively more on the alert in the use of their senses than in coordinated use of their muscles; they tend, according to these investigators, to be quite sensitive to sights, colors, moving objects, and noises and sounds, while remaining somewhat backward in such motor performances as sitting upright or manipulating objects with their hands (Shirley, 1939).

One special hazard connected with prematurity is blindness resulting from a peculiar eye abnormality known as retrolental fibroplasia.

Apart from factors in his own make-up, special factors in the environment may have a bearing on the development of the premature child. Since he begins life even more helpless than the normal child he must have extra care and attention, and his parents may not only be extremely cautious and anxious but tend, at first, to be overanxious, getting into the habit of looking even more eagerly than parents of full-term babies for signs of progress in the child's development. At a later time, according to Shirley (1938), parents may shift from a policy of shielding him to a policy of trying to urge him on, in order to push or accelerate his development. This is one illustration of what might happen to make the lot of the premature child less easy-going and "natural" than that of a robust

baby born at full term. In keeping with this, Shirley reports that the premature children in her study showed more nervous mannerisms (such as nail biting) and more irascibility than did full-term children. Although it has not been demonstrated that factors such as those associated with prematurity, will necessarily have a lasting effect on a child's disposition or temperament, any change in what is expected or demanded of him will put an extra burden on the child's development.

Early Signs of Individuality

Almost from the moment of birth, infants show differences in personality. Some are decidedly more mobile, active, and on the go than others. During ensuing hours and days, some babies tend to be more or less restless, irritable, fussy, while others are more placid and serene.

Parents frequently are struck by the difference between a new baby and previous babies born to the family. Likewise, observers who are not intimately associated with the family can begin to note, by the time children are only a few weeks old, characteristics which distinguish one child from another as a distinct personality. In an investigation (Shirley, 1933b) in which twenty-five babies were observed repeatedly from the time of birth up to the age of three years, the investigator describes characteristics that distinguished babies from one another from the time of birth, such as irritability, tone and timbre of cries, motility and tonicity of muscles. The investigator also noted that distinctive patterns of behavior could be observed that characterized a baby's reactions in a variety of situations. Similar observations are reported by another investigator in an earlier study of a pair of twins (Gesell, 1928). Although both children shared the same home, the same mother, and similar physical health, the children showed consistent differences in such matters as "placidity, length of crying, vigor of protest, tolerance of physical discomfort, readiness of smiling, social responsiveness."

Such observations suggest that there are inborn differences, but both investigators cited above emphasize the difficulty of evaluating

the relative roles of inborn and environmental factors. The interaction of hereditary and environmental factors in a child's development is so complex that it would be difficult to isolate either in pure form.

Owing to the many factors that may influence a child's behavior during the first days of life—including, among other matters, the "age" of the child when delivered (whether "premature" or full term) and the circumstances of his delivery—it is hardly to be expected that the infant's behavior soon after birth will give a reliable prediction of the distinctive personality traits which the same child will show as he grows older.

Apart from the question of whether, or to what extent, early differences in personality are inborn, it is obvious that differences in behavior can also be traced to conditions in the environment. The very fact that there are vast differences among adults who are caring for infants means differences in the environments to which infants are exposed. The adult's personality will be reflected in the ways he approaches and cares for the child.

Learning During the First Days and Weeks of Life

As soon as a child is born the stage is set for him to begin his career as a learner. How early does this process of learning begin? It is probably from the time of birth, if not before.

Mothers sometimes report signs of learning within a week or so after birth when a hungry, crying baby ceases his crying as soon as he is picked up and held in his mother's arms. Previous to this he became quiet only when actually fed. Now the preparatory step of being picked up and held produces quiet. It is as though the child accepts the picking up and holding as a signal of feeding. If the child thus responds to a signal, where previously he actually had to have a sip, it seems that he has "learned." However, observations such as these do not necessarily prove that learning has taken place. It is possible that the experience of being picked up and held would at the later age have a quieting effect in itself, even if not previously associated with the experience of being fed. The evidence of learning

becomes more convincing if the child resumes his crying more vigorously than ever, if there is a longer than usual delay between the time when he is picked up and the moment he is fed.

Many interesting studies have dealt with the subject of learning in early infancy. Some of these have raised the question of whether it is possible for a child during the first days of life to acquire a "conditioned" response. In one such experiment (Marquis, 1931), eight infants were bottle-fed from the time of birth, and at each feeding a buzzer was sounded. After three to six days, seven of the eight infants exhibited many responses related to feeding, such as an increase in sucking and mouth-opening, a lessening of general activity and crying in response to the buzzer alone. Since, as noted earlier, an infant's response to any sort of stimulus may be quite generalized, some of these effects might possibly have occurred even if feeding had not been used as a "conditioning" stimulus.

A clearer picture emerges in a study (Kantrow, 1937) of sixteen infants whose ages when the experiment first began ranged from one month and fourteen days to three months and twenty-seven days. In this study a buzzer was sounded for five seconds, and then continued to sound during fifteen additional seconds as the nipple of a milk bottle was inserted in the infant's mouth and the infant proceeded to feed. Here it was found that sucking in response to the buzzer alone was established in from three to nine feedings (during the course of which the buzzer and the bottle had been presented together from sixteen to fifty-three times).

An interesting feature of the findings, however, was that the infants would give the sucking response to the buzzer when they were hungry but not when they were sated. In other words, even though a connection had been established between sucking and the buzzer, it required the motive of hunger to call it forth. In a sense we might say that the infants used what they had learned only when there was good use for it. In addition, it was found that the conditioned response to the buzzer disappeared or was extinguished when, in a second part of the experiment, the buzzer was sounded repeatedly without the accompaniment of feeding after the infants were partially sated. In other words, these young infants on the one hand

learned to respond to significant signals (buzzing as a signal of food) and, on the other hand, they also came to discard false signals (buzzing that no longer betokened food). While still less than four months old, these infants were thus demonstrating "intelligent" behavior.[13]

Another approach to this problem was made in an investigation which raised the question as to whether infants adapt to (that is, "learn") a feeding schedule within the first ten days of life (Marquis, 1941). A record was obtained of the general bodily activity of sixteen babies who were fed on a three-hour schedule until they were eight days old and then, on the ninth day, changed to a four-hour schedule. A record was also made of the activity of another group of newborns who were on a four-hour schedule, and of another group fed on a self-demand schedule, that is, fed whenever they seemed hungry. Activity was recorded mechanically by a device that supported the bassinets in which the infants lay.

Figure 1 gives a picture of the activity of the three-hour and four-hour groups during selected between-feeding periods from the second through the eighth day. Both groups show a falling off in activity after a feeding, as though the infants were gradually settling down. At the end of three hours, the three-hour group is relatively quiet, while the four-hour infants thereafter show a rising rate of activity. Contrast this with the curves in Figure 2. This shows what happened when the three-hour group was put on a four-hour schedule. At the end of the third hour, when they usually had been fed, the activity of these infants increased abruptly, and by the end of the fourth hour it reached a level higher than at any previous time. It also quite exceeded the level shown by the children who had been fed on a four-hour schedule from the beginning.

This high level of activity was frequently accompanied by crying. Moreover, an increased rate of activity continued even after the infants had been fed. It might have been expected that the infants, when changed from a three-hour to a four-hour schedule, would have become so fatigued by the excess of activity during the extra hour's wait that they would settle down after at last having been fed and would go to sleep sooner than before. Instead, the opposite occurred.

[13] See also Wenger (1936) and Wickens and Wickens (1940).

During the periods following the shift to a four-hour schedule the infants continued to be more active than usual and again, at the end of three hours, there was an abrupt rise in activity.

These observations indicate that the infants on the three-hour schedule had "learned" to expect food, so to speak, at the end of three hours. Their vigorous reaction when this expectation was defeated is vividly shown in Figure 2. Just what does this reaction

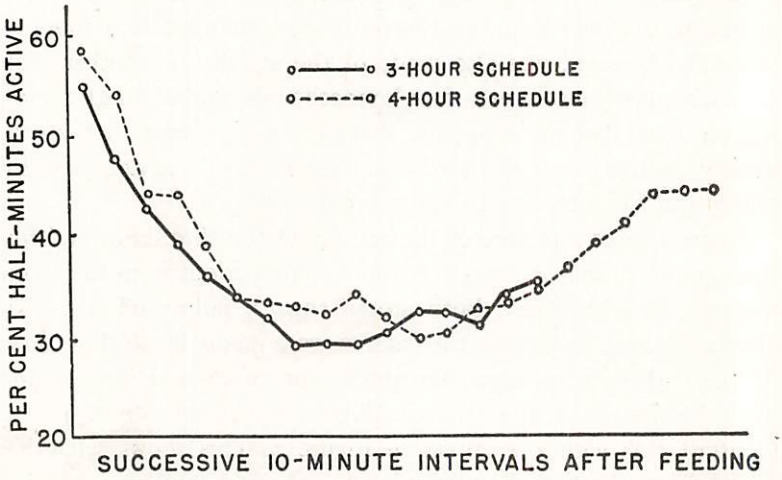

FIG. 1. Comparison of activity between feedings of babies fed on a three-hour and a four-hour schedule. Average of all subjects, days 2-8. Adapted from Marquis, D. P., "Learning in the Neonate: The Modification of Behavior Under Three Feeding Schedules." *Journal of Experimental Psychology*, 1941, 29, 270. Used by permission.

mean from the point of view of the experience of the infant? Are the infant's reactions accompanied by awareness and feeling? We can only guess as to what the answer might be. However, it does not require a stretch of the imagination to conceive that many disruptions and uncertainties in feeding and other aspects of everyday care might eventually have an important bearing upon the child's mood and temperament and on the shaping of what we call his personality.

In this same study, there also was evidence, although not unmis-

takable, that the infants on a four-hour schedule were "learning" to wait four hours. As indicated, they showed an increase in activity between the third and fourth hours; but as the days went on, this activity tended to lessen rather than to increase.

During the period of the study the infants who were on a self-demand schedule appeared to be hungry and were fed approximately

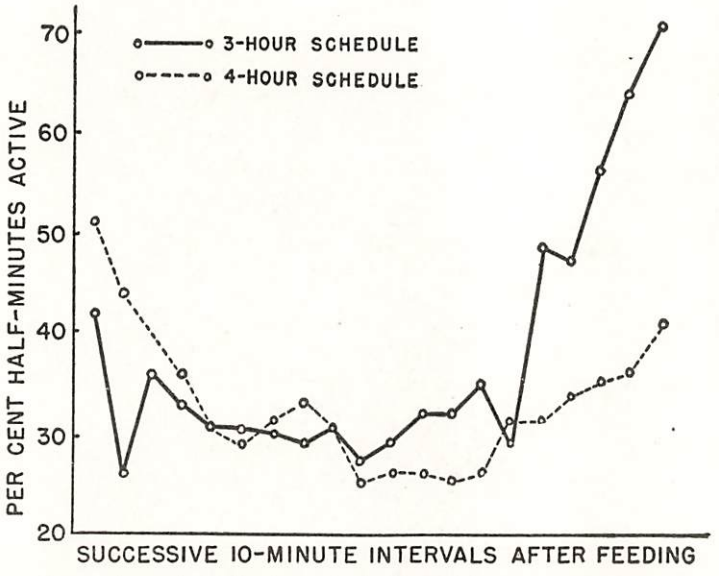

FIG. 2. Comparison of activity between feedings of babies on a four-hour schedule and babies previously fed on a three-hour schedule but now changed to a four-hour schedule. Average of forenoon and afternoon periods for all subjects on Day 9. Adapted from Marquis, D. P., "Learning in the Neonate: The Modification of Behavior Under Three Feeding Schedules." *Journal of Experimental Psychology*, 1941, 29, 273. Used by permission.

every three hours on the average. In other words, while other infants of the same age sought food about every three hours, the four-hour babies seemed to be on the way toward accepting the four-hour schedule. Already the "four-hour" babies were adapting themselves to a mode of life (as far as feeding was concerned), even though this did not conform to what many of them would have chosen for themselves. Thus during the first days of life does a child reveal a

resiliency, a capacity to adapt to what the environment demands or affords. As time goes on he will continue to show this capacity as he adapts to countless demands, whether these be arbitrary or inevitable, wise or foolish. However, as we shall see in later chapters, there are limits beyond which a child cannot be pushed, and there are demands he is unable to sustain.

CHAPTER FOUR

Aspects of Living and Learning in Infancy

This chapter deals with some of the developments that take place as the child moves from the helplessness of early infancy toward increasing self-help. It emphasizes features of the child's life which receive a large amount of attention from adults. The chapter first touches upon certain broad principles that operate in the day-to-day relationships between the infant and adults who care for him, and with the subject of discipline. Following this there are sections on feeding, sleeping, bladder and bowel control, and early developments in the sphere of sex.

Psychological Meanings of Physical Care

The child's bodily contacts with his mother and others who care for him, when counted one by one, run into the tens of thousands. [1] These contacts are significant from a psychological point of view. To pick up an infant, to hold him in one's arms, to feed him, bathe him, and play with him means far more than just physical manipulation: In each event of this sort there is a communication between the adult and the child. It is largely through activities in which there is physical contact that the young child enters into interpersonal relationships with others, and from these he obtains nurture for his psychological development, much as the nourishment he gets through his mouth provides food for his physical growth.

[1] During the first two years the separate contacts connected with feeding alone may run to about 3,000.

Emotional Intimacy

The adult brings to these interpersonal relationships his own emotions, moods, and mannerisms. All kinds of emotional currents flow from adults into their relationships with an infant. Physical contact is the surest means of getting into emotional intimacy with a child, provided that the adult has the capacity for it.[2]

It is out of these early interpersonal relationships that the child gets affirmation of his worth as a person. It is through them that he has his first experience of being accepted or subtly rejected. These interpersonal relationships constitute a significant element in the world in which the child lives as he begins to perceive, to discriminate, to become aware of what is happening around about him, to gain familiarity with the details of his environment, and to distinguish the familiar from the strange. It is in this interpersonal setting that he has experiences with others that influence his attitudes toward himself. The infant also contributes, of course, to the process of emotional interchange.

Many, and perhaps most, of the experiences that occur in the child's early contacts with people early in life are infused with feeling. The child has much at stake. He is hungry, for example, and even though he was fed bountifully only a few hours before, he is desperately hungry again. Emotion is bound to come into play when something for which he is so eager is provided or is withheld. Again, he is lying in an uncomfortable position, or a pin bothers him, or he is wet and the discomfort is annoying, and the relief from it is pleasant. Even if all his physical needs are cared for he shows pleasure in having company and disappointment (if he is alert and in the mood) when someone whose company he enjoys leaves him. In the meantime, many of the child's own undertakings are

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[2] Even when children have passed far beyond the infancy stage they will seek emotional closeness through the route of physical closeness, as they do, for example, by "giving in" to sickness or fatigue. The fact that physical closeness can lead to psychological closeness is sometimes seen in the feelings older children have about a school nurse if she is a sympathetic sort of person who has on occasion cared for their physical needs. Some children will confide things in the nurse they wouldn't tell to a friendly teacher.

accompanied by eagerness or annoyance and an obbligato of sounds that have emotional overtones as he cries, coos, trills, gurgles, yawns, sighs, and belches.

The emotional quality of the interpersonal relationship between the child and significant adults provides the cradle for the child's emerging self. Here is the stuff out of which the first learned aspects of his personality are formed, and the substance that goes into the building of attitudes toward himself and others. Long before a child can begin to formulate his observations into ideas that can be expressed in words, experiences are pouring in upon him that constitute the source of his first impressions of what other humans look like, act like, and do to him, with him, and for him, and how it feels to be with them. He has his impressions of the sound of their voices, the appearance of their faces, the tempo of their movements. the comfort they bring, the discomfort they cause.

The contacts an adult has with a child likewise provide a means for the adult not only to express his feelings but also to discover emotional resources he may not have experienced before or known that he had. Parents who turn the physical care of their children entirely over to hired help are denying themselves this discovery and what it can mean for their own growth. When parents do not enter into the earthy and intimate details of child care their relationships with the child, at least during infancy, are rather academic.

Parental Attitudes as Related to Their Practices

There are many observations which indicate that the way a person feels about a child is a more important consideration than the particular practice he uses in his care of the child.[3]

One observation is that the way a parent elects to use to deal with his child and the methods of child care are determined to a significant degree by tendencies within his own personality. The way in which even a very highly educated parent cares for his child will not depend simply on the latest scientific methods of bringing up children he happens to know about, but by feelings and attitudes

[3] Several studies bearing on specific implications of this statement are cited in later sections.

of a very personal sort that determine not simply what he chooses to learn from others (or not to learn) concerning child rearing but also, to an even more significant extent, determine how he will apply what he has learned.

To be sure, there are exceptions to this rule, for some of a mother's or father's policies in dealing with children will be influenced by fashions in child rearing rather than by their own spontaneous impulses. A mother's decision to breast-feed or not to breast-feed may be influenced by the customs of her social group and not solely by what she regards as the thing to do. On the same grounds she may decide to spank or not to spank, to use guards and splints to prevent thumb sucking, or to use no restraints of this kind, and so on. At another time or in another community or in another culture she might have chosen a different policy. At any time in any culture there are customs, fads, and fashions in child rearing which become more or less prevalent, and parents conform to them, at least outwardly, even though the parents who are similar in this respect are very different in other respects. These influences are important, for the customs in child training in a community may be so strong that a parent cannot stand out against them. But what we are here considering is something more personal —something in a sense more intimately tied to the mother's attitudes —which makes a difference not only in determining whether she will choose a certain practice but also in the way she applies it.

In a study by Shirley (1941), the view is set forth that the attitudes and personality of the mother permeate every response she makes to her baby and determine the manner in which she administers every phase of child care. Shirley illustrates this position with a lengthy record of two mothers and the way each of them brought up her first-born child from the time of birth to about the age of six years. Evidence which supports this view, although not so directly, comes from studies by Baldwin, Kalhorn, Breese (1945) and Baldwin (1949) who observed the interaction between parents and children in a number of homes. They noticed certain syndromes or clusters of behavior representing characteristic ways in which parents tended to deal with their children. They observed that some

of these characteristics stood out quite consistently when parents were observed for a time and then reobserved. They identified parents who showed, for example, a preference for democratic practices. They also found parents whom they described as "indulgent": parents who did not seem to be able to separate their own personalities from the personalities of their children and tended to give them too much care and protection. They also describe actively *rejectant* parents and nonchalantly *rejectant* parents who seek to avoid their responsibilities for children by ignoring and then punishing or by demanding strict compliance.[4]

In another series of observations of parents, Lafore (1945) found that parents show characteristic ways in their dealings with children. According to her, some might be described as predominantly cooperative in their approach, others were dictatorial, others were uncertain (and were called "temporisers," wavering in their stand), and a fourth group, whom Lafore called "appeasers," seemed to have no firm assurance in their own wisdom and judgment.

Evidence that the way an adult deals with children reflects the kind of person he is, rather than a deliberate policy of education, also comes from observations of teachers. Anderson, Brewer, and Reed (1946)[5] in a study of the psychological interplay between teachers and their pupils found that some teachers used what the investigators identified as "dominative" while others used "socially integrative" approaches to children. They found that certain behavior patterns and personality characteristics of the teachers persisted from one year to the next, even though the teachers during the second year were dealing with a different group of children. In other words, whether a teacher is rather peremptory and bossy, or whether she tries to enter into a relationship in which there is mutuality and a process of give and take, depends not simply on the characteristics of the child with whom the teacher is dealing or on what she has been taught regarding methods of teaching but upon tendencies within the teacher herself. A further finding in the

[4] For instruments that have been developed for assessing parental attitudes, see Champney (1941), and Shoben (1949).

[5] See also Anderson (1937b and 1939).

Anderson, Brewer, and Reed study was that the behavior of the children changed with different teachers. When such changes occur it probably means that children are adapting and protecting themselves as best they can as they go from one class to another, while the teachers continue from year to year in the same groove.

The position that the way a parent deals with his child expresses tendencies within his personality means that we cannot judge the parent simply by noting how he handles this or that detail of child rearing. It is the quality of the total relationship rather than the way a given detail is handled that is most significant. A person can follow all the rules in the book, memorize all the "best practices" which an expert or authority on child rearing has laid down, and still not function as a real parent.

This does not mean that findings regarding the effects of this or that practice are without value. When it is found in research studies that severe punishment usually is not an aid to learning, but a severe hindrance, such a finding will probably not change the attitude of the parent or teacher who would like to punish but it may stay the hand of an adult whose impulse is to hit a child, and it will help to support the adult who feels strongly against hitting even if he has been told, on ancient authority, that he should hit. So this item on child management can make a difference even though the child in time may sense the hostility of the parent who would hit (if the books told him it would be all right) and the compassion of the parent who shrinks from hitting. But there is a deeper significance in this.

Child Care and the Process of Self-Discovery

To the extent that the practices a person uses with children are an expression of his own inner tendencies, to that extent a person has something of a mirror of himself in his dealings with his children. In other words, a parent's ways of dealing with children can, if he has the courage to look and the insight to see, tell him something profoundly significant about himself. His impatience, anger, or anxiety, his eagerness to correct, his tendency to be bossy, to reach decisions without considering what the child would like, or to let

things slide, to stay aloof, to avoid responsibility, to ignore situations in which he might take a constructive hand, or his tendency to approach his child as though they might together enjoy a common humanity and to face a common struggle, may reveal a great deal concerning the way he manages the internal affairs of his own private life. When there is a predominantly friendly feeling in relations between the parent and the child it probably means that there are predominantly friendly currents of feeling in the parent's total approach to life. Much friction between the parent and child probably means the parent has many frictions within himself. Much anxiety about a child very likely means a parent has much anxiety about himself. If the parent has the kind of patience that enables him to recognize that often when a child is slow he really is doing the best he can in his own good time, such an attitude is likely to reflect that the parent also has an attitude of patience toward himself and his own limitations. Again, harshness toward children (or the need to exert an extra effort not to be harsh but kind) probably reveals that a parent is harsh toward himself.

The parent (or anyone else who has a child in his care—aunt, uncle, baby-sitter, teacher, nurse) may not be able to see what appears in this mirror of himself. It is not easy to see a reflection of one's self. But the fact still remains that the experience of dealing with everyday issues in child rearing offer adults a splendid opportunity for self-examination.

In their dealings with their children parents have a new opportunity and a new incentive for advancing their growth through continuing the process of self-discovery and self-fulfillment which began when they themselves were infants. This is, or might be, the greatest reward that comes from having children.[6] And a paradoxical feature of it is that a parent in whom the channels for self-discovery already have been open for some time will be most eager to keep them open and have the humility and courage to do so. The more

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[6] This is, or might be, one of the greatest rewards also of being a teacher. There is perhaps no richer experience in life than that which comes from joining with others in a mutual struggle, such as the struggle that is necessary to achieve what education, in its literal and most profound meaning, stands for.

a parent is able to perceive and accept in his awareness of what goes on in his relationships with his child the more he recognizes how much there is yet to learn.[7] In this sphere, knowledge of one's ignorance is the beginning of wisdom. But if a parent sees his job primarily as that of administering the best child training techniques and closes the door to self-discovery, he will fail to perceive, and even make it a point not to perceive, how the parental relationship might help in his own process of finding himself. Instead of growing in self-realization he may use his operations with his child to become hardened in his preconceptions and to become more confirmed in his anxieties, so, if anything, he loses rather than gains in the process.[8]

It is easy to overlook this facet of the problem, for it is easier to grab at rules and apply them to others than to inquire why one hit upon these rules and what they might mean as a projection of oneself. In keeping with this, it probably is true that the more a parent (or teacher or anyone with children) shies away from opportunities to examine his own operations as a person, the more he is likely to follow rules.

This concept of the role of the parent as one who can learn and grow from his role as a parent does not, of course, mean that he must give himself over to the child as though the child were the teacher and he the pupil. In order to grow as a parent he must not surrender anything in his role as a parent. He is the older, wiser, and responsible one, and it is with him that each final decision must rest. He cannot realize much from his role as a parent unless he lives up to that role. If, in the processes of examining the basis for some of his policies and decisions, he faces questioning and doubts concerning them (as he inevitably will again and again if he is honest), he still has to carry on as best he can. He cannot grow and learn unless he can reserve to himself the right to make mistakes.

Lines of Communication

In the foregoing we have emphasized that what an adult does in caring for a child is not simply to perform a series of acts, for he

[7] ". . . unto everyone which hath shall be given."

[8] ". . . and from him that hath not, even that he hath shall be taken away."

is also communicating something of himself. It is easy to discern that this process is taking place in connection with the more or less obvious ways of "handling" children, especially the older ones: What the adult says or does may clearly show that he is friendly and interested or that he is impatient and annoyed. But what about the subtler interchanges that take place, especially when the baby is quite young? In connection with this question an interesting theory has been proposed by Harry Stack Sullivan (1947, 1953).

According to Sullivan's theory, there is a kind of emotional linkage, involving emotional contagion or communion, between the baby and other significant people (the mother or the nurse). He calls this emotional linkage *empathy*. He maintains that there is communication between the child and the significant adult through empathy before the child is mature enough to perceive overt expressions of emotion, such as an older person can sense when he sees another grow pale, or hears the hoarseness or high pitch of another's voice, or notices that another's heart is pounding and that his body trembles.

As examples of communication between the mother and the child, Sullivan states that if the mother hated the pregnancy, and deplores the child, "it is a pediatric commonplace that there are feeding difficulties" with the child. Likewise, if a mother who is otherwise deeply attached to the infant is seriously disturbed or frightened or worried by something at the time of nursing there will be feeding difficulty or the infant will have indigestion.

Sullivan says that there are indications that this empathy about which he writes endures throughout life, at least in some people. But he assumes that the time of its greatest importance is in later infancy and early childhood—perhaps from the age of six months to twenty-seven months.

This concept of a kind of emotional communication between an adult and an infant through signs and symbols different from those older people usually notice opens an area in which there has been little systematic research. In adult life we do often respond, of course, by way of what we call hunches or intuition, which sometimes are right and sometimes wrong. Such impressions, when

examined, seem to rest on mild cues; the cue on which our hunch that a person is annoyed may be a fleeting facial expression, a slight movement of the eyes—little signs of tension which pass in an instant but which one might be able to identify or describe if they could be enlarged and made to last a little longer.

To investigate this theory regarding empathy as a form of communication with children as young as six months would be somewhat difficult, yet the view that there may be communication of some kind squares with observations in everyday life. For example, babies sometimes definitely are more fretful or more at ease with some people than with others. Persons who work in hospitals that care for babies have mentioned that there are some nurses whose presence seems to have a soothing effect on babies, while the same babies tend to cry and fuss when in the care of other nurses on the ward. If such observations are true, it probably means that something is happening in the interchange between nurse and baby that cannot be identified simply through the large movements that are involved in lifting, carrying, or bathing the baby. There may be more subtle and yet quite tangible qualities in the sum total of movements of a comfortably relaxed nurse who likes children and who welcomes them into her arms that differ from the total effect created by a nurse who is anxious and tense or who goes through the motions of her job in a mechanical way.

Discipline

Infancy and early childhood have been called the period of domestication. This early period has also been referred to as the time during which the child becomes housebroken. This is a rather smug way of looking at the dramatic tasks of development during the first couple of years of life, yet it is true that one important aspect of a child's early development consists in acquiring many of the skills, habits, and manners that distinguish a more or less polite civilized human being from other creatures. Some of the change comes about in the process of growth. But from an early age, the

child, directly or indirectly, is under pressure to conform to certain external standards of conduct. These pressures may be imposed on him with a heavy hand or through a series of gentle nudges. But they do operate, and they constitute the beginnings of discipline.

A child needs freedom to grow and to learn in his own way but he cannot thrive on unlimited freedom. He needs discipline. This is one of many paradoxes in development. A child cannot fully enjoy the fruits of freedom without surrendering some of his freedom. A parent cannot help a child to learn how to fully enjoy his freedom without in some ways curtailing that freedom. A parent must be both permissive and restrictive, and a failure to strike a fairly good balance between the two or, better yet, an integration of the two, will have unfortunate effects. For, if a child from an early age has more freedom than he is able to handle he will run into trouble. If no limits at all are set for him and he is left to discover these for himself, he is likely to become anxious and uncertain. The aim in discipline is not to curtail freedom but to give the child greater freedom within limits he is able to manage. On the other hand, if his freedom is overcurtailed he will meet thwarting and frustration so intense that he rebels, and this also may arouse anxiety.

Discipline, broadly speaking, is any kind of influence designed to help the child to learn to deal with demands from his environment that go counter to demands he might wish to make upon his environment. Discipline arises out of the need to bring about a balance between what the individual wants to do, what he wants of others, and the limitations and restrictions demanded by the society in which he lives or by the hazards in the physical environment.

What the child does, and abstains from doing, by virtue of the discipline he receives is something he would not at first do of his own accord. He spontaneously will try to feed himself, but it is as a result of discipline that he eats with his spoon instead of his fingers.

Without some discipline it would be hard for a child to survive

and, if he did survive, he probably would be a wreck. It is through restrictions and controls that are imposed upon him that a child is spared from dangers which he might otherwise run into at an age when he is too young to perceive the consequences of his actions, as when he plays with fire, or runs into heavy traffic, or ventures into deep water before he can swim.

Other circumstances that involve discipline are regulations tied to the public interest, convenience, and necessity, such as traffic regulations, time schedules, everyday amenities of life, and cleanliness.

From the child's point of view, if he gives any thought to it, discipline is something rather arbitrary, at least when first imposed. It is partly by reason of the child's lack of recognition of the full meaning and possible consequences of his behavior that discipline has to be imposed in the first place. *Disciplined* behavior can thus be distinguished from *spontaneous* behavior, and it can also be distinguished from behavior that is brought about by *education*. Disciplined behavior is (at least at the beginning) a kind of conformity to external demands, while education involves a process of cultivating internal possibilities.

One benefit of discipline is to relieve the child of responsibility of having to decide matters he can't do much to change. Rules and customs set by the home, the school, and the community save the child always from having to decide what to wear, where to be and when, what to do, whether it is proper for him to keep property he has found, whether or not he should go to school, and so forth. There is discipline growing out of a need to share limited goods, such as when there is rationing of food or fuel on a national scale, or the kind of rationing which continually takes place in the home, where things are so arranged that one child does not get all the steak while another gets nothing but spinach, or so that the father and mother do not give all their attention to the most demanding child in the family while other children receive no attention. Without such rules a child would continually have to face a moral struggle, and he might become quite anxious and guilt-stricken in the process. There is the further fact that discipline, in defining what is expected

of a child, also in a sense defines what is not expected of him and so helps him to know when he has achieved what is expected.[9]

There is the further fact that discipline must, in a sense, be imposed upon a person either by others or by himself as long as he lives. As a young person grows up, he must learn to accept many rules and regulations even if they seem to him to be coercive and meaningless. He must learn to bow to some of the facts of life or he will wear himself out by futile resistance. Among other things, if he is bright he must learn, as the saying goes, "to suffer fools gladly," and if he is a dull person he must learn that people who think they are bright can be as headstrong and foolish as those who know they are stupid.

If children have not been disciplined in a manner that would put a curb on their expectations from others, they are due for some hard jolts as they move on in years. Without being aware of it, they may have illusions concerning their own rights and a vague notion of omnipotence which will clash sooner or later with the realities of life.

The overindulgent parent, likewise, may be so forebearing and so patient that the child demands from others a degree of patience and forebearance which they will not be able to give him.

One of the sad consequences to a child of having had too little discipline at the appropriate time is that some of the penalties will be imposed upon him by the very adults who did not discipline him. Even the most angelic parent eventually will be tried beyond endurance if his child, as he grows older, continues to make such demands as we usually allow only a young child to make or demands such privileges as only an older person can win by his own efforts. The parent may conceal his impatience and his irritation, but the economy of human relationships is such that one human being cannot constantly, over a long period of time, make unreasonable demands upon another human being without penalty. So we find that

[9] For discussions of the need for discipline, from the point of view of the child's developmental needs, see Geisel (1951), Havighurst (1952), and Slavson (1952).

parents who have been extremely indulgent may break forth at a later time with an almost childish complaint that their youngster is not sufficiently "grateful," or we may find that parents discover and admit perhaps, after a lapse of many years, that they are being imposed upon by their child, and this feeling may give them a desire for revenge (although they are not likely to admit this to themselves or others).[10]

Discipline as such is neither good nor bad. It depends on its appropriateness. Discipline which helps to protect the child from the trouble that his lack of foresight and prudence might bring upon him is essential, as we have noted. One outcome of such discipline is to help the child to acquire control over his actions. Eventually, as he grows older, he must more and more impose such controls himself. But discipline is unhealthy when it is unduly severe, or restrictive, or imposed in order to coerce a child rather than to help him, or administered in a harsh and vengeful manner, or directed against some children in the family while others are held free of it. Examples of unduly restrictive and unhealthy forms of discipline occur when we insist on a level of cleanliness that is impossible for a young child to achieve; or insist that he do things punctually and on schedule (and in a hurry) when that is not in keeping with his maturity level; or insist that he sit still for hours in school or in church when his organism is geared to be active; or insist that he do his arithmetic lesson not only correctly but within an arbitrary and tension-producing time limit (as so often is done at school); or insist that he not only restrain his temper but even perform the impossible feat of not feeling angry when someone treats him harshly or unfairly. Discipline may express a basic attitude of accepting the child or of rejecting him. One can reject a child by not giving him the discipline he needs or by overdoing discipline.

Whenever children are in a situation in which they are subjected to discipline simply on the theory that discipline for its own sake

[10] If one could look into the "secret selves" of parents one meets in everyday life, one probably would find many who have feelings of being abused by their children. An ironic feature of such feelings is that the parents probably are blind to the process by which they brought this grievance upon themselves.

is a good thing, they sooner or later are likely to rebel, either openly or through devious means. However, a child may be slow in formulating a suspicion that the discipline he has been subjected to is not what it might be.

It is not just children of two or four, but young people in their twenties and older people in their forties or sixties who face questions of discipline. One difficulty under which many parents and teachers labor is that they have not resolved some personal problems which arose out of the kind of discipline imposed on them when they were small. The following are some principles which may be helpful in facing this problem of discipline (at least, they have been helpful to the writer) not only in the management of children but also in the management of life and human relationships at all age levels.

1. Discipline of one sort or another is essential.

2. The discipline that is imposed may be healthy or unhealthy in the sense that it is destructive or constructive in its ultimate effects.

3. The discipline an adult imposes on children may tell a great deal about him as a person. The discipline he imposes does not simply represent what he, as an arm of society, must do in bringing up his children for it may reveal important facets of his personality that have nothing to do with his duties.

So, when an adult faces a disciplinary policy—should he or should he not allow his child to do this or that, should he or should he not insist on obedience and conformity in this particular—it is sometimes just as helpful to ask what there is in him that raises this question as to ask what are the needs of children that demand an answer to the question.

4. The discipline children receive, whether it is wise or unwise, often results in grievances on their part—feelings of having been abused. Whether or not such grievances are justified, such grievances are important, and they often have serious repercussions. When we ask older children and adults about unpleasant aspects of their relationships with their parents and teachers, many will think of occasions when they thought their elders were unfair, unjust, and

unkind in the discipline they imposed. Such happenings often leave a youngster with a more or less clearly defined feeling of resentment which continues into adult life, and the feeling may persist as long as he lives. Many children reach adulthood with grievances against some feature of their schooling or some person connected with school.[11]

Feelings of having been unfairly or too severely treated at home are likely to arise in the best families. Even the wisest parent is likely now and then to do something foolish, or arbitrary, or inconsistent in the process of facing the endless and countless decisions of everyday life where discipline is involved. (A parent so perfect that he could avoid mistakes is not long for this world.) Besides, the very nature of discipline and the conditions that make it necessary are likely to involve friction. Often, the parent must impose discipline in situations in which he, as an older person with a wiser head, can foresee unhappy outcomes, possible grief, danger, and distress, which the child cannot see, and must be protected against. So what the parent demands may seem arbitrary, if not foolish, from the child's point of view. If it were not so, the child himself would see the wisdom of what the parent demands, and perhaps no discipline would have to be imposed.

5. Discipline is not only a frequent source of friction between the child and his elders but it is also a frequent source of friction between the home and other forces in the community. This occurs, for example, when families differ to a marked degree in the freedom they allow children: Some children may go unattended on streets where traffic is heavy, while others may not; some may go sleigh-riding on the streets, others not; some must keep fairly regular hours

[11] The thinly disguised hostility toward education which one can so often detect when members of the community attend school meetings, and the open attacks on education which are so popular and virulent from time to time, probably arise in large measure from such unresolved grievances. The older person is taking revenge against the school he went to when he was a child, but unfortunately the only object he can attack is the school as it is now. So even though he may have had very good reason for feeling that he was abused (schools have abused children on a monumental scale), it is unfortunate that his attack is directed in an irrational way against the present school system, which may or may not deserve criticism.

for meals and sleep, others not; some get new clothes for the asking, others don't. Where such differences exist, there will be some children who feel unfairly treated.[12] There is bound to be some friction now and then also between the home and the school, because of differing standards of discipline. Sometimes these can be resolved, but sometimes the school people become resigned, and sometimes parents give up the struggle with a school that insists, as they see it, on conformity to primitive standards.

6. Even though there probably will be frictions and grievances, these will be less serious in the long run (although not any less acute at the moment) if the over-all relationship is one of friendliness and consideration.

7. However, when such a spirit is lacking, a child's grievances are likely to multiply, and the more abused he feels the harder he will be to get along with, so a vicious circle is established.

8. Ultimately, the discipline which at first is imposed upon the child by others becomes something he adopts for himself. In other words, it becomes a kind of self-discipline. The more mature a child is, the more self-discipline we may expect of him in the sense that he makes decisions and assumes responsibility for his actions without needing always to have a vigilante standing over him or a posse chasing after him.

9. But while we expect more self-discipline in an older than in a younger child this does not mean that self-discipline as such is good. The discipline a child imposes on himself, like that imposed on him by his elders, may be good or bad, healthy or unhealthy. A person may impose upon himself expectations and rules of conduct and standards of goodness, achievement, neatness, and perfection that are irrational and make a slave of him. Usually we think of a person who possesses self-discipline as one who is responsible for himself. But self-discipline may become a very irresponsible form of conduct if the person imposes so many "oughts" and "shoulds" upon himself that he is a driven creature. It is tough when a child is

[12] There may also be some who feel that their parents don't care enough about them to be firm and run the risk of being unfair, but they are not so likely to notice this clearly or to speak up.

pushed around by unreasonable demands imposed by others, but it is even tougher when he is pushed around by unreasonable demands which he imposes upon himself.[13] Self-discipline is destructive and harmful if it means a kind of curtailment and denial, a kind of shutting off of self from the opportunities of life. Self-discipline is destructive if it means that a person is so assiduous in conforming to what he ought to do or in playing safe within rigid boundaries that he has no energy for discovering his abilities or recognizing his own wishes and his own rights.

10. Earlier, we made the distinction that discipline is a kind of conformity imposed from without, while education is a kind of encouragement of development from within. Education (from *educere*, to lead forth) means to provide conditions whereby something within the child may be developed. Education calls something forth, while discipline imposes something. When a father provides a child with a bicycle, a place to ride it, and some help, if the child needs it, in mounting and getting started, he is providing education. When he tells the child where he may or may not ride the bicycle, and when a policeman orders the child not to go through a red traffic light with his bicycle, it is discipline that is being imposed. As a child grows older and as the scope of his ability to take responsibility widens, the training from others best suited to his growing powers will include less and less discipline and more and more education, and the education he undertakes in his private life will be less in the nature of self-discipline and more in the nature of self-realization.

11. Conduct which at first is a response to a disciplinary process may, in time, be seen by the child as part of an educational process, as, for example, when the child recognizes that rules and regulations which at first were arbitrarily imposed are essential to his own development. But, by the same token, what seems to be an educational process may actually be a disciplinary process. If a person, for example, is constantly compelled at school to memorize materials which to him are meaningless and is coerced into acquiring

[13] Such self-discipline is a kind of compulsion. Horney (1950) has given an illuminating account of the tyranny of irrational "shoulds" and "oughts" in people's lives.

a set of academic skills he is not, according to the distinction here made, being educated. He is simply in the process of being disciplined, whether he happens to wear diapers or collegiate clothing.

Discipline and Punishment

It is a truism in psychology that praise is a better incentive to learning than reproof, and rewards are more effective than punishments, yet it is impossible to bring up a child without some kind of punishment. Even if parents studiously try to avoid any direct punishment, such as spanking or scolding, they are bound sooner or later in countless ways to punish the child by indirect means, such as depriving him of something he wants, or openly or subtly communicating to the child that they disapprove of him or of what he is doing.

The issue of punishment raises psychological questions that go far beyond the scope of this book. However, in practically all chapters of this book the discussion deals in one way or another with means of communication through which adults encourage the child in a given line of conduct and methods through which adults directly or indirectly discourage a child from asserting or expressing himself in ways they regard as inappropriate. There are just a few rather simple points that will be mentioned here.

In keeping with the general concept underlying this chapter, the question as to whether punishment should be administered and the question as to the choice of method of punishment should be determined in terms of the larger purposes which underlie the relationship between the parent and the child and the outcomes of learning and growth which the parent is seeking to promote. Punishment for the sake of punishment has no value. Moreover, punishment for the sake of promoting something positive probably has little or no value, either. However, punishment can be a deterrent, and to deny this is to be unrealistic. We, in effect, punish a two-year-old child when we obviously curtail his activities so that he might not again run out into traffic or once more fall into a nearby brook. When we, as far as this child can see, deliberately curtail his freedom of action as a consequence of something he has done

we are, in a sense, placing a penalty upon him. It is probably impossible to avoid many such tactics which are seen as penalties from the child's point of view. A quite common way of imposing a penalty of this sort occurs when a mother removes a child from a table where he is slopping food or removes him from contact with other children with whom he is fighting or denies him a chance to run and play freely with a neighboring child just after he has been in a fracas.

The more intelligible the punishment is in relation to the end it is supposed to achieve the more effective it probably will be. Again, the more direct the relation, the better it probably will be. By the same token, the less vagueness or confusion or doubt there is the better it probably will be. Further, the more the punishment is regarded as having a kind of completeness or finality about it, the better it probably will be. Some interesting observations bearing on these aspects of punishment have been brought out by Liu (1950) who, in a study of Chinese-American children as compared with Caucasian-American children, takes issue with the view that corporal punishment in itself is more damaging than other forms of punishment. Other vaguer forms of punishment may, according to this view, be more damaging. A little slap, for example, may be relatively wholesome if it reminds the child specifically of what it is he has done wrong, and having thus been punished he may be given the impression that now the episode of wrongdoing has been written off and that no longer is an accusation of guilt held against him. Again, it is argued that corporal punishment may spare the child from confusion as to just what it is that he did that was wrong. This is exemplified when a child is disapproved of but the disapproval is not sharply and clearly tied to a specific thing he has done. On the other hand, it is obvious that corporal punishment, like any other kind of punishment, can be abused, and can serve primarily as an outlet for the hostility and anxiety of the punisher rather than as a means of helping the one who is punished. Moreover, by resorting to physical punishment the adult is obviously taking advantage of the fact that he is bigger and stronger. With his superior brute strength, an adult can overwhelm a child through physical punishment even

when he is clearly in the wrong or is definitely being outwitted and outargued and even outdone as far as reasonableness, patience, and emotional poise are concerned.

One important aspect of punishment is that the more punishment can operate as a practical matter, with a clear terminal point, the better it probably will be. On this theory it probably is better if a parent under the aggravation of the moment "boils over" and scolds than if he "stores up" grievances against the child and then, at odd moments and for what to the child might seem to be very insignificant reasons, snipes at him or complains about him or confronts him with old mistakes or accuses him in various ways.

The foregoing amounts to saying that the more forthright and honest the punishment is, the better it is likely to be.

Another broad principle, of course, is that the effect of this or that bit of punishment will depend not simply on the act of punishment but on the kind of relationship that exists between the person who punishes and the child who is punished. The more forthright the relationship is, and the more it is based upon mutual respect and trust, the more the acts of punishment, when they occur, will be influenced by this relationship. And when such a relationship exists, punishment will run in both directions, for the adult, being fallible, will do things the child punishes by his disapproval, just as the child will do things the adult punishes by disapproval. But normally we expect the adult to be more discriminating in his disapproval and more mature in his judgment.

Everyday Activities and Everyday Care

The activities involved in obtaining food and rest and in the elimination of waste are of vital importance to the physical welfare of the infant, and they are a matter of considerable concern to his elders. A section of this chapter will deal with these worthy occupations.

The young infant spends a large part of his time in sleep. By the time he reaches school age he still sleeps about half of every twenty-four hours. By the time he is eighteen and from then on

until death, he devotes about one-third of his time to sleep. In the meantime, his sleeping habits have received a good deal of attention, first from his parents and later from himself.

Even more demanding of attention during early infancy are the functions involved in getting nourishment and eliminating waste. The child makes periodic demands for food. He frequently voids his bladder and his bowels. In due time, this natural flow of events is drastically changed. Where before the child need only suck for a living, he now has to chew and take a more active part in the feeding process, and even when he is very young his eating becomes regimented in countless ways. The processes of elimination, which at the start were completely involuntary, are also brought under control, usually with considerable prompting from the child's busy mother. Much of the child's earliest education revolves around activities connected with feeding, sleeping, and other "routine" details of his everyday care. It is by way of these activities that he is first introduced to many of the demands and taboos of the society in which he lives.

Feeding and Behavior Associated with Feeding

One might expect that the establishment of good feeding habits would be the easiest feature of a child's training, for the drive to obtain nourishment is one of the strongest drives in living creatures. As one can observe in everyday life, however, children's feeding behavior often gives a good deal of trouble. The more a child's diet and eating routines can be based upon natural wants rather than upon a conglomeration of rules and formulas, the smoother the road is likely to be. Likewise, the more nearly changing demands, such as the introduction of solids, weaning, the use of skills involved in handling cups and other utensils, and the niceties of eating behavior, can be scaled to the child's growing capacities, the better the outcome is likely to be.

To find what might be the natural course of development in the child's wants and appetites and in the abilities underlying the skills involved in eating, unfortunately, is no simple task. There are differ-

ences between individual children with respect to needs, tempo, and rate of progress. Quite as important a complication is the fact that the child's natural tendencies, whatever they may be, often come into conflict with customs, parental attitudes, and habits, which are associated not only with feeding as such, but also with all other aspects of the child's daily relationships with his parents.

The feeding situation, and activities connected with it, is in a way a parade ground for many interests, emotional currents, and important characteristics for both the parent and the child.

Sucking

In the newborn child the impulse to suckle usually is strong enough to enable the child to take food if he is given the breast or the bottle. Some babies, however, need help to begin the process, and there are modifications in the sucking mechanism after the child is born, but sucking is pre-eminently something most infants can do very well. Furthermore, as Feldman (1920) has pointed out, the mechanism involved in sucking is highly protected against physical damage. The composition of the pad of fat in each cheek, the so-called suction cushion, is such that it is not readily absorbed. Feldman reports that it is present even in very emaciated babies when fat has disappeared from every other part of the body. It is also rich in blood supply.

Although the sucking mechanism is comparatively well developed and is highly protected, there are changes after birth in the structures involved, and there is an increase also in the nerve supply of the lips (Gesell and Ilg, 1937). The newborn child often drools and leaks at the corners of his mouth by reason of imperfect coordination between lips and tongue and because the angles of the lips are not as completely supplied with nerve endings or as completely under control as are the median portions of the lips. Likewise, the newborn's suckling and swallowing movements are closely merged, so that unswallowed milk runs out of his mouth when he releases the nipple. During the act of nursing, he also swallows a good deal of air, and feeding must sometimes be interrupted so that he may belch. This ritual is sometimes referred to as "burping the baby."

As the child grows older and becomes more proficient at nursing, less air is swallowed and the need for belching diminishes.

Sucking Activities Apart from Food Getting

Although sucking and mouthing are important for food getting, these activities from an early age come into use apart from the process of feeding. The baby sucks, even though his appetite for food is sated. Many babies do a certain amount of sucking, apart from nursing, from the time of birth. The act may be most prominent when the child is hungry and may continue immediately after he has been fed. A case has even been reported of an infant who apparently had sucked his thumb before he was born (Gesell and Ilg, 1937). The baby's thumb was swollen on delivery, and soon after the birth cry he placed the swollen thumb in his mouth.

Certain obvious conditions encourage a child to suck his thumb, because it is about the most convenient thing in the world for him to suck, it is always with him, and it is a handy device for setting off a mechanism that is primed for action from the time of birth and that from an early age is a feature of what must be a rather satisfying experience. Although there are differences in time of onset and in amount of finger sucking, all babies are likely to suck their fists, fingers, or thumbs at some time or other during infancy and early childhood. The hand is brought to the mouth a good deal during teething, but this is not the only occasion.

A child may cease to suck for a time and then do so again more vigorously than before. Many children, as is well known, continue the finger or thumb-sucking habit for several years. And many adults also have sucking, biting, and mouthing habits. Usually one need only observe a gathering of grown-ups a few moments to see such habits in action. For instance, we see one who, like a beaver, gnaws at pencils; one who is a lip biter; another one who sucks on a dry pipe; and still another whose tongue and lips fondly caress a juicy cigar.

The fact that practically all babies at some time or another suck their fingers is a matter of importance because it is a feature of child behavior and also because adults so often are disturbed by it. Some

adults disapprove because they think there is something unbecoming about finger sucking, and some worry about the possibility that such sucking, if it continues, will cause the jaw to be malformed, and the child will end up with a fine set of buck teeth.[14] By reason of the importance attached by adults to the habit, some extra space is devoted to it here.

There are many theories that have been proposed to account for finger sucking. The most obvious theory is that the child sucks his fingers because he wants to, but there are other more learned theories.

Sucking as a Response to an Oral Drive

One view is that the child sucks his thumb or fingers because the need for exercise of the sucking mechanism is not satisfied in the process of sucking to obtain food. Levy (1937) has reported observations in support of this. According to this theory, a bottle-fed child is more likely to continue to suck if the hole of the nipple is large, permitting the milk to flow freely, than if the aperture is small and the child must work harder and longer to obtain the same amount of milk.

By way of analogy, Levy gives the example, familiar to one who has been raised on a farm, of the behavior of young calves. A dairy calf who is not allowed to suckle his mother but is taught from the start to feed from a pail is likely, for some time after his first feedings, to suck an accommodating finger or the ear or tail of another calf or any other object that is handy. Such sucking may be inspired by the fact that the pail-fed calf probably gets a smaller ration of milk than a calf who has a cow to himself as a source of supply, but at any rate the pail-fed calf continues to suck when even he must

[14] The question as to what are the chances that thumb sucking will cause malformation of the jaw in a given child cannot be answered on the basis of available data. Apparently, the chances are greater if the practice is continued vigorously after the child has his secondary teeth (Lewis, 1937) and if the structure of his jaw is such that he already has a poor bite (Sillman, 1951). Many children who suck persistently for extended periods of time and who then drop the habit do not show any dental effects. Moreover, it appears that in some cases where malformation has taken place, the deformity may be corrected in the process of growth if the sucking habit is stopped.

realize there is not much nourishment in it. Such sucking by the calf seems to correspond, at least in some respects, to thumb sucking in the child, although in the child's case the sucking is likely to last longer and the habit will be influenced by many considerations which do not bother the average calf.

If finger sucking is brought about by lack of sufficient exercise of sucking apparatus, one might expect that some babies would take to finger sucking when they are being transferred from bottle feeding to feeding out of a cup. Levy gives such an example of a child who sucked his thumb when a bottle feeding was dropped from his daily schedule, and then stopped when this bottle feeding was resumed. The theory that a child's sucking of his fingers or other objects may be intensified by a lack of sufficient sucking exercise in connection with food getting seems acceptable as far as it goes. But this theory alone cannot account for finger sucking in childhood. Some children suck their fingers even though they are allowed to nurse at their mother's breast as much as they seem to want (Simsarian, 1948), and in one study it was found that children who were fed by cup during the first ten days of life did not show more spontaneous sucking or mouthing (apart from feeding) than babies fed by breast or bottle (Davis, Sears, Miller, and Brodbeck, 1948). Observations in keeping with this are reported by Klackenberg (1949), who also reports findings which suggest that a child is less likely to develop the habit of sucking his thumb if he is a slow feeder and is allowed to use a pacifier.

Oral Activity as an Adjunct to the Drive for Food

Another view of sucking, tied to the above, is that sucking of the thumb or some other object is an effort to gain some of the pleasure associated with getting nourishment, even when there is no food.

The context in which sucking occurs—the alleviation of hunger—is one of the earliest and most profound satisfactions in a child's life. From an early age the getting of food, in which sucking plays the most active part, has a pervasively quieting and comforting effect. The baby gets a gnawing at his vitals, but shortly he is relieved;

he was restless, but now he is relaxed; he was troubled, but now he is at peace. The act of sucking is entrenched in a large context of satisfaction and comfort. That the child should discover ways of partly re-establishing at least a feature of this context, namely sucking, is not to be wondered at. The theory here is that the child's desire to suck is, at least in part, a *secondary* drive in the sense that the act of sucking is the means whereby a highly gratifying relief from hunger (presumably a *primary* drive) becomes gratifying by itself.

The Concept of Sucking as Related to Sexuality

Another view is that the stimulation of the inner membranes of the mouth brought about by sucking and mouthing is a kind of erotic stimulation: It provides sensuous pleasure in the same family as the pleasurable sensations arising when the genitals organs are stimulated. The satisfactions connected with stimulation in the region of the mouth (oral satisfactions) as described from this point of view represent a feature of the child's sexuality. When a child is preoccupied with such oral satisfactions he is said to be manifesting a kind of *oral eroticism*. The period of being preoccupied with such activities has been referred to as an *oral* phase or stage and has been regarded as one of the *pregenital* phases of sexual development. It has similarly been proposed that children also go through an *anal* and a *urethral* phase in the development of sexuality during which they are absorbed by sensuous experiences associated with stimulation of the tissues of the anus and urethra. According to this same theory of sexuality the focal point of erotic stimulation in a later and more mature phase is mainly in the genital area. But this genital eroticism is related to the same primitive tissue needs that underlie the satisfactions derived from stimulation in the oral and anal areas.

It has also been proposed that there are character traits that are associated with failure to pass through the oral and anal phases of development in a successful manner.[15] The theory underlying the

[15] Gorer (1943), and Gorer and Rickman (1950) have written about early child care practices as related to adult characteristics of people in Japan and Russia. Kluckhohn (1947) has discussed child rearing practices among the Navahos in relation to later behavior tendencies.

idea of such character traits is that the child's normal progress from one phase of development to the next may be disturbed, and that his anal or oral preoccupations may become distorted and intensified to an unhealthy degree if his natural interests are severely interfered with and if he is subjected to abuse during the oral and anal phases of his development. The frustration may lead to emotional complications and give rise to character traits which carry over into later years. According to Fenichel (1945), the deprivation of oral satisfaction that is caused by early weaning may create a craving for such satisfaction, resulting in a pessimistic or sadistic character. On the other hand, according to the same line of thought, late weaning, which denotes fuller and longer satisfaction of oral drives, results in self-assurance and optimism (Fenichel, 1945).

Actually, the accumulated research data do not support anything so simple and categorical as this. It has not been established, for example, that the earlier the weaning occurs the greater will be the evidence of a drive to meet unfulfilled needs for oral satisfaction. As a matter of fact, there is some evidence that the child's desire for oral activity does not diminish but increases the longer he is allowed to go unweaned and suck freely at the bottle or breast during the first year or so.[16]

How important are these views for understanding the young? In the writer's judgment, there are two answers. First, references to the *anal* and *oral*, to *oral* and *anal* eroticism, and to *oral* deprivation appear in writings on children so frequently that at least it is good to have a bowing acquaintance with these terms. But the question

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[16] See Sears and Wise (1950); Orlansky (1949) has reviewed theories and findings dealing with this subject up to about the year 1949. In a later study (Sewell and Mussen, 1952), in which information was obtained from interviews with mothers of 162 rural mid-Western children, the data led to the conclusion that there was no significant relationship between abrupt or gradual weaning and personality maladjustment (as measured in the study). The results gave no support to the view that breast feeding, self-demand schedules, or gradual weaning promote better personality adjustment than bottle feeding, regular scheduling, or abrupt weaning. See also Sewell (1952). In a study by Thurston and Mussen (1951) questionnaires and the Thematic Apperception Test were used with ninety-one college students to explore the relation between early oral gratification and later traits. The results were conflicting, and no clear relationship was found.

as to whether activities connected with sucking and mouthing need to be regarded as having an erotic or sexual significance is another matter. In the writer's opinion, this question is not important in itself. To advance the view that sucking has a sexual connotation we simply need to define sexuality so broadly that it includes these oral activities, but this is just a way of juggling with words.

The second and main consideration is that anything which commands the child's attention and absorbs his energies to the extent that oral activities often do must be viewed as important in the economy of his life, whether or not these oral activities have any direct significance as related to sexual development. When we use punishment or other harsh measures against these activities we are punishing something in the child. We are rejecting *him*, in a sense, and that is a larger consideration than whether we also happen to interfere with his sexual interests. It is the child as a growing self that is most important, or to use Freudian language, it is the ego more than the libido that we are concerned with here. The way we deal with a child's sucking activities is important not simply because of any specific drives or special deprivations that are involved but to the degree that what we do constitutes a part of the sum total of influences in the environment that help or hinder the child in his process of growth.[17]

Functions of Mouth and Lips in the Larger Economy of Early Life

To assess the place of oral activities in the child's life we must consider them not simply as drives or as an adjunct to feeding or as an expression of erotic tendencies: We must see them in terms of a larger setting of activity and striving.

The child's activities with his tongue, lips, and mouth play a very

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[17] Observations by Newton (1951) suggest that it is not the fact of breast feeding or flexibility or rigidity of the feeding schedule *per se* that are the important factors, but rather it is the attitude toward the child that is most meaningful. Newton's findings also indicate that it is the total feeding situation rather than any one isolated factor in the manner of feeding that is important. Similar overt procedures in feeding can have psychologically different meanings, depending on the attitudes of the mother.

important part in his early ventures in life. They represent not simply a means of food getting, or (if we accept the theory) a kind of striving for sensuous pleasure, but they are also part of the mechanism through which the child expresses himself and gets into communication with the world in which he lives. In this respect the lips, tongue, and mouth serve much the same function as his eyes and ears. So when we interfere with the child's oral activities we are, to some degree, depriving him as we would deprive him if we every now and then put blinders on his eyes and a sound-blocking screen over his ears.

Many of the child's first active contacts with his environment come by way of his mouth and lips. Even after he has become alert to sights and sounds he continues for a long time to make considerable use of mouth and lips in exploring the world about him. When he has acquired the ability to bring objects to his mouth with his hands, there is a period during which he tries to carry to his mouth almost everything he can grasp. The mouth is a sensory avenue to the environment. The lips and tongue serve the infant in a manner analogous to the way in which cutaneous impressions from the fingers serve the blind adult. As soon as he is able to bring things to his mouth, the infant explores contours of surfaces, tests the hardness and softness of things with his lips and teeth, apparently explores the temperature of objects, and appears to be active in exploring the taste of things. Although this latter exploration may even be secondary, it becomes quite prominent; and so the child will cram a block into his mouth and insert balls of lint, bits of earth, crayons, and morsels of food that he discovers on the floor after he has refused what remains on his own plate and has had his fill.

Chewing

The newborn child is structurally better equipped for sucking than for chewing, not merely because he lacks teeth, but also because his lower jaw is poorly developed. Biting is usually not prominent until about the fourth month, although it may appear considerably earlier. Gesell and Ilg (1937) observe that occasionally children even at the time of birth show "surprising strength of bite,"

and they add that "this strength is not only unseasonable but unsuitable to normal sucking" (P. 28). Chewing movements likewise may appear even before a child has any teeth and may precede by a considerable time the actual chewing of food. In Bühler's (1930) inventory of the behavior development of infants, chewing is noted at the sixth month; the ability to chew well, in connection with feeding, is placed at forty-four weeks, but at that age the child is not able to masticate all foods; the ability to chew well unground meat is placed at eighteen months.

Many children go through the motions of chewing before chewing functions as a necessary feature of feeding. They "chew" on milk, applesauce, puréed vegetables, and the like. It is as though they were practicing the performance in preparation for future use. This is another illustration of the developmental principle of anticipation as set forth in earlier chapters.

Spontaneous Food Demands

To what extent can a healthy child's own demands be trusted as a guide for determining when, what, and how much he should be fed? This is a vital question both from a practical and a theoretical point of view. If a child's appetite for food is trustworthy, both he and his parents could be spared much trouble (if the larder is stocked with the right things). The question also has theoretical importance, for what is found true of demands for food might also, on investigation, prove to be true of certain other demands. The more it can be shown that a child's wants or desires provide a good indication of his needs (not only for food, but also for rest, sleep, activity), the less necessary it becomes to restrict and restrain him and to push him around.

The evidence bearing on this question is provocative. In studies of babies during the first few months of life, preceding and following the weaning period, it has been found that the spontaneous food demands of young children seem to be rather wise.

The findings that have been obtained in studies of infants who have been on a "self-demand" feeding schedule from the time of birth or soon thereafter go counter to practices and schedules which

from time to time have been recommended by authorities. One finding, already noted in an earlier chapter, is that a schedule of feeding the child approximately every three hours is more in keeping with the child's own demands than is the frequently adopted policy of feeding him every four hours. This statement should be qualified by a word to the effect that there are such wide variations among children that any fixed schedule will, whether it provides long or short intervals between feedings, be out of step with the needs of individual children. Even so, it would be a good thing, apparently, if hospitals that accept "lying in" cases and homes to which newborn babies go would expand their charity or increase their budget to accommodate a more flexible schedule of feeding.

In one study (Simsarian and McLendon, 1942) it was found that in the interval between the second and the tenth day of life there was one day on which a child on a self-demand schedule demanded to be fed only six times and another day on which the same child demanded eleven feedings. In spite of such fluctuations, this child and others who have been observed tend to show a certain amount of consistency in the number of feedings demanded per day. In the study just cited there were five days out of nine during which this newborn demanded nine feedings.

A further observation has been that as the infant grows older he reduces on his own accord the number of feedings demanded per day.

Still another observation is that the amount of food intake varies widely from day to day and from feeding to feeding. A child might, for example, once in a while demand another feeding within a very short time after he has been fed. He might, on one occasion, demand a large meal and on another, when his mother expects that he will be quite hungry, take only a sip. But in his day-to-day and week-to-week demands there is likely to be a larger pattern of consistency if the baby is in good health.

The systematic findings bearing upon this problem in early infancy are limited partly because only in recent years has anyone undertaken to do systematic research on this subject, and partly because research of this kind is very time consuming. It is interesting

to note, however, that the studies reported so far are in agreement on such main points as those mentioned above.[18]

The findings in self-demand studies at the early infancy level also indicate that infants seem to be well nourished when on a feeding schedule geared to their own demands. There has been no evidence that any of the infants who were fed according to their own demands suffered any ill effects from this policy. In addition, some mothers will maintain that the experience is, if anything, psychologically more satisfying both to the infant and to the mother than is a fixed schedule.

The findings obtained in studies of the responses of young infants to a self-demand schedule are generally favorable, but they leave certain questions unanswered. The children with whom this program has been followed systematically from a research point of view are few in number, and it is by no means certain that they are from families representing a normal sampling of the population. Moreover, there are many practical difficulties, although this holds true in connection with any kind of feeding schedule. Where there are several members in the household, unavoidably many things happen that interfere with freedom to give prompt attention to the infant's demands for food.

However, some mothers with whom the writer has discussed this matter have not found this difficulty as serious in actuality as it might seem to be in theory. An important aspect of the self-demand feeding program is that it involves not simply another way of handling a feeding situation but it reflects, in a sense, an attitude and a philosophy with regard to child care. It requires flexibility and resiliency. It is not enough to be flexible with respect to the feeding schedule alone: it requires flexibility in the entire day's routine, and a certain amount of give and leeway both on the mother's part and also on the child's part. To give the child a certain amount of freedom to express his needs means that the mother must have a certain amount of freedom within herself.

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[18] Other studies of infants on self-demand schedules have been reported by Gesell and Ilg (1937), Trainham, *et al.* (1945), Simsarian (1948), and Simsarian and McLendon (1945).

It might be argued that by heeding the child's demands the mother surrenders her own freedom and becomes a slave. Actually, that is not in keeping with the findings, for the child whose natural and legitimate needs are well cared for is likely, in the long run, to be less demanding than the child who from an early age must make an extra struggle, cry extra hard or long, and, so to speak, at an early age, carry on a campaign to get attention. From interviews with mothers, Simsarian (1948) found that a self-demand feeding schedule does not seem to produce confusion and disorder into family routine. On the other hand, Colm (1949) discusses the fact that some mothers are troubled by the uncertainty which a flexible schedule might involve.

Due to the fact that a policy of child care adapted to the child's own demands requires that the mother be a rather adaptable person, there no doubt are mothers who would find it difficult to relax and to be at ease by reason of the uncertainty and unpredictability of a self-demand schedule. This difficulty might, in turn, have an unfavorable effect on the way in which the mother deals with the infant and other members of the family.[19]

The findings that have been obtained in studies of "self-demand" tally pretty well with common sense. Certainly it seems to be good judgment to feed a hungry child rather than to have him wait until the clock strikes a certain hour. Similarly, it is only reasonable to accept the idea that a child is more hungry at some than at other times. It is a curious fact that it has been necessary for the benefit of doctors and laymen to reaffirm such ordinary wisdom as this.

Self-selection of formulas in early infancy. Infants have shown a wisdom and logic of their own, not only when given a choice as to when and how much they should eat, but also when given some choice as to what food to take.

In one experiment (Davis, 1935), three infants, beginning at or before the tenth day of life, were offered, in rotated order, four different formulas at each feeding and were permitted to take as

[19] Jackson (1945) discusses difficulties encountered by a mother on attempting to continue at home a self-demand regimen successfully followed while she and her baby were in the hospital.

much of each as they wished. Apart from variations and vagaries in amount consumed, the children showed unmistakable preferences almost from the beginning. As the children grew older (the experiment was continued until they were about eight months old), they would sometimes reject the bottle with the unfavored formula without even tasting it, thus indicating that they apparently also were responding to odor, appearance, or some other cue. There were found to be large differences among the babies in the patterns of choice. At the end of the experiment the nutritional status of the infants was reported to be "excellent in every way."

Spontaneous food selection and consumption in later infancy. When a child's diet includes solids, his feeding increasingly involves questions of what to eat as well as when and how much. To what extent can a child now be trusted to make good choices?

Findings bearing on this point have been reported by Davis (1928, 1933), who observed children when they were free to select their own diets. The children had several choices at each meal, but all the items in the total menu were not presented at any single meal.

Following is a sample tray in one series of experiments with three newly weaned babies: lactic milk, whole milk, cooked marrow, raw beef, cooked beef, chicken, sea salt, ordinary salt (no foods were salted, but the child was free to take salt as he pleased), raw carrots, cooked turnips, cauliflower, and crisp, rye crackers. The twelve items represent a selection from a larger list of over thirty items which were variously combined at different meals. The children were free to choose; food was not offered to them or suggested; the nurse simply sat by and helped the child to get what he wanted, as he indicated his wants by pointing, reaching, opening his mouth to receive food previously pointed out, and in other ways. So far as they desired or were able, the children were permitted to feed themselves by means of their fingers and to wield their own spoons.

It was found that there were wide variations in the self-selected menus of the same child from time to time and in the menus selected by different children. The selections often were thoroughly unorthodox and sometimes startling from the point of view of an adult. But physical examinations and measurements seemed to show

that the children made wholesome choices and thrived. Some illustrative findings and observations are reviewed below. The reader is referred to the original studies for more complete details.

When the experiment was begun—with three newly weaned infants who had had no experience with solid foods—each infant at first chose some foods which he spat out. What determined initial choices could not readily be decided. After the first few meals, however, the infants chose foods promptly without regard to their position on the tray, and there was not the subsequent spitting out which had occured at the start. At a given meal, a youngster would often select a bizarre diet, including as many as seven eggs at a single sitting (in another series of observations, a two-and-a-half-year-old child ate ten eggs at one meal!), or as many as four bananas. Salt was taken only occasionally, and often when taken the infant would splutter, choke, and even cry, but he would refrain from spitting it out and would later repeat the performance with the same spluttering.

The infants tended to eat certain foods in waves: after eating in moderate amounts such given articles as fruits, eggs, or cereal there would follow a period when larger and sometimes "astonishingly large" amounts were taken, followed in turn by a decline to the previous level. Symptoms of overeating did not appear in connection with such "jags," nor were they followed by periods of disgust. The children were omnivorous, and their preferences were unpredictable. They showed no consistent preferences for cooked or raw food, but some items were definitely preferred cooked and others raw. Spontaneous dunking of hard crackers in milk or water was observed, especially at periods when a new tooth was erupting. The infants tended to take their foods "straight" rather than to mix foods or even to pour milk over cereals. One infant who had active rickets when the study began spontaneously consumed large quantities of cod-liver oil, and then later left it untouched when this active condition had been overcome, as revealed by blood tests and X-ray examinations.

In another study (1931), Davis reports observations made of fourteen children in a hospital ward, each of whom selected his own

diet from the various foods prepared for the day. The findings in this series of observations conformed to those noted above, and children, for all the vagaries of their appetites and occasionally grotesque choices, seemed to be wise in their choices as far as could be determined by records of their digestive balance, health, energy, and growth. There was also less waste than under the usual system, as measured by the weights of garbage from this and other wards.

The evidence in Davis' study, as well as in other observations, indicates that a young child has more sense about eating what is good for him than he often is credited with, granted that he has wholesome articles of diet from which to choose. Among the many significant observations in these studies is that a nutritionally balanced diet is not something that need be supplied by an arbitrary package of so much of this and so much of that every day. The balance can be achieved over longer periods of time. Recognition of this fact alone can spare parents a good deal of anxiety and children a good deal of nagging.

Interesting as the above findings may be, it is not so easy to apply them to the individual child at home. In the home, where means and time are limited, the provision of a variety of articles of food would be difficult, although many different, alternative items that add up to a complete diet need not be presented at every meal.

A self-selection program in the average home would involve many complications and, to be properly safeguarded, would require some knowledge about nutrition (Roberts, 1935). The most serious consideration is the fact that a child's appetite, his eating, and his "feeding problems" do not occur in little compartments of their own but are influenced not only by what happens in the eating situation but by all that is involved in the relationship between the child and other members of the household. There are other complications. For example, a child's demands for certain foods may vary if his mother happens to be a good or a poor cook.

In view of the vast variety of conditions and circumstances that have a bearing on the feeding situation, the findings with regard to self-demand (in timing and amount of feedings) and self-selections (in choice of foods after the child can begin to choose) should not be,

and cannot be, adopted too literally or rigidly. The underlying concept in these findings is not that we should substitute one absolute system of control (what is demanded of the mother by the child) for another absolute system (what is demanded by the mother). The idea, rather, is to encourage as much as possible an attitude of respect for a child's own needs and wants, and to underscore the point that "mother knows best" only if what she "knows" is determined to a large degree from what she can learn from her child. There are two further points that may be added. One is that findings such as the foregoing, obtained from studies of young children, often are confirmed in everyday dealings with older children. It has been observed that an older child, when given a chance, often will go on feeding jags, consuming (if permitted) several eggs at a sitting (even though perhaps he has refused to eat even half an egg each day of the preceding week), or half a bowl of salad (even though he often resists salads), or a quart or more of milk (after having left half of his milk at some earlier meals). These jags cannot perhaps be counted on to insure a balanced diet, but they do seem to help. Again, it can be observed that when a child refuses good food which he ordinarily eats more or less eagerly, it often means that he really is "off his feed" in the sense that he is overfatigued or is coming down with a cold or some other ailment. In such circumstances, again, the wisdom of the body is vindicated.

Another point to remember is that food pressures and food refusals can be used both by the parent and the child as expressions of unhealthy tendencies within themselves. Adults bring to the feeding situation all kinds of stereotyped "oughts" and "shoulds": A child *should* drink a quart of milk a day even if it stretches his stomach; one *should* not eat meat unless one also eats bread or a vegetable; one *should* eat a cereal even though the same food value might be obtained from a small piece of bread; a family *should* not have the same main dish four dinners in a row (although all except the one who lays down the law would like it), and so on. The spontaneous demands of children may be in part a corrective, or at least a protest, against compulsive tendencies that are expressed in rigid food prescriptions of this kind.

Self-Help in Eating

The development of self-help in eating is a very important feature of the child's progress toward independence. Many of the child's earliest efforts to try out his abilities and to assert himself are expressed as he tries to feed himself with his fingers. At a later phase, some of his sturdiest battles for self-determination are fought with a fork and a spoon.

The ability to execute the skills involved in feeding himself depends to a large degree upon the child's motor development, since it involves postural control and the ability to reach, grasp, and convey objects to the mouth. Many of the steps involved in the development of this ability have been traced by Gesell and Ilg (1937). They noted a sequence, such as the following, in children's use of a cup. At twelve weeks, the average child will notice the cup but is unable to grasp it; his movements are jerky, gross, and lacking in direction. At sixteen weeks the normal infant makes contact with the cup; at twenty weeks he makes a "corralling" approach upon the sides of the cup; at twenty-eight weeks he grasps and lifts it, usually with both hands; at thirty-two weeks he grasps the handle; it is not until at thirty-six weeks that his manner of lifting the cup in an upturned position, grasping the handle, and mouthing the rim approximates the true raising of a cup to the lips for drinking purposes. Although he thus manipulates the cup at thirty-six weeks his concept of the cup as a utensil and a receptacle is still in a very rudimentary state, according to Gesell and Ilg. Sequences can also be observed in a child's handling of a spoon. A child may begin to take notice of a spoon at about sixteen to twenty weeks.

Although the child exhibits much activity both with spoon and cup for a long period, it was not until fifty-two weeks that the average child in a survey by Gesell and Ilg brought the two into combination and definitely began to treat the cup as a receptacle and the spoon as a tool to be inserted into the cup. Well-defined self-management of the cup was not observed in the typical child until about sixty-five weeks. He now tilted the cup as it emptied, but by means of his palms; not until later did his fingers assume the main role in tilting.

An indication of the complexity of the act of drinking from a cup can be gathered from the fact that the act calls not only for skillful manual control but also coordination of hand and finger movements with respiratory movements and rhythmic action of the tongue.

The child is likely to do a good deal of finger feeding during the second year, while the development of ability to use cup and spoon is going on, and unless he is curbed, his hands and fingers will come into play a good deal for a long time thereafter. Use of a blunt fork may be expected at about two to three years, of a blunt knife between the ages of three and five, and of the knife for cutting at about five to six. However, as in other matters, there are wide variations among children.

In the process of acquiring skill in self-help, there will obviously be a good deal of awkwardness, spilling, messing, dropping of utensils, and the like. In order to practice eating skills, the child must necessarily be given a chance to make mistakes. Moreover, in these skills as in other developments, a child may not always show constant improvement. He may show an advance, revert for a time to an earlier form of behavior, and then advance again. Such fluctuations are a feature of normal development.

The period during which a child is learning to handle table utensils is a trying period to most parents. Even if a parent is not finicky or squeamish, he is likely to become impatient at times with the spilling and messing, the clumsy tipping of containers of food, and the child's insistence on doing some things for himself when it is obvious that he cannot succeed. The child, on his part, also has quite a job, for not only must he cope with new skills but he also must often put up a struggle for permission to try his hand. In Table I there is a summary which illustrates an aspect of one of the many skills related to self-help in feeding. It is based upon observations of nursery-school children in the act of pouring water from a pitcher into a small glass. The performances of the children were roughly classified according to four levels, as indicated in the summary which is adapted from Slater (1939).

According to Table I, it was not until the age of three and a half that the median child in this group had achieved good control,

with little spilling, in pouring water from a pitcher into a glass. At the age of four years, there still were several children whose performance was somewhat unsteady. Before the age of three, a majority of the children were unskilled in the performance, but this did not keep them from trying. It is characteristic of the young child that he will try his hand at all kinds of skills before he has the necessary

TABLE I

LEVEL OF PERFORMANCE AT VARIOUS AGE LEVELS IN POURING FROM A PITCHER[20]

Level of Performance	*Number of Children at Each Level of Performance at Each Age*						
	2 yrs.	*2½ yrs.*	*3 yrs.*	*3½ yrs.*	*4 yrs.*	*4½ yrs.*	*Total*
Water goes all over the table	3	5	3				11
It goes into the cup, but overflows it		8	7	2	1		18
Wobbly control, some spilling, stop before overflow		6	12	6	5		29
Firm, easy control; little spilling		1	8	7	7	4	27

neuro-muscular control to master the performances involved. Unless he is restrained, he practices the operations, and this practice goes on apace with the maturation of the underlying mechanism. Both the learning and the growth process must receive due recognition. Attempts to force his progress and demands for a degree of skill that is beyond his power are undesirable, just as are undue efforts to prevent him from trying his hand for fear that he will spill and drop things.

FOOD PREFERENCES

As we have indicated, children begin to exhibit food preferences at an early age. Various factors connected with the food itself can

[20] Adapted from E. Slater, *II. Types, Levels, and Irregularities of Response to a Nursery School Situation of Forty Children Observed with Special Reference to the Home Environment*, Studies from the Center for Research in Child Health and Development, School of Public Health, Harvard University. Monographs of the Society for Research in Child Development (1939), 4, No. 2, 148 pp. Reproduced by permission.

influence in such preferences (including taste, texture, and consistency) the appearance of the food, the way it is served, and so on (Borgeson, 1938). In some cases there may be an organic aversion, as in allergic conditions. Some articles may be generally disliked as compared with others, but there are pronounced individual differences. When a child shows aversion to a food, it obviously would be well to know the cause, especially if the item represents a convenient means of supplying an important feature of his diet. As noted earlier, a child will show shifts in his preferences from time to time. It also has been observed that a child may show dislike for a new article of diet when it is first introduced and then spontaneously acquire a liking for it if it is made available from time to time and no effort is made to coerce him.

Often it seems that a child's tendency to like or dislike various foods, his tendency to eat almost anything (or to try any food item at least once), or to be choosy and guarded, conservative, and rather restricted in what he will eat is not an isolated characteristic but is consistent with other tendencies in his everyday conduct. A child who eats everything in sight, eagerly cadging his full share or more, may also be more than ordinarily alert to make sure that he gets his share of other things—gifts, attention from his parents, and so on. A child who tends to be quite critical of food that is served may be similarly defensive and inclined to faultfinding in other ways. One may find in individual cases that a child who is finicky about food may also be finicky about his clothes. The conservative child who won't eat an unusual food, such as frogs' legs when he has a chance, may also be a child who refuses to wear a cap or shirt which differ from what his playmates are wearing. When attitudes toward food are consistent in this way with other attitudes (which of course does not necessarily always hold true), one may assume (1) that something more inclusive than an idiosyncrasy pertaining to food alone is involved and (2) the feeding behavior may be a symptom or sign that can, if viewed in this light, "alert" the parents to the fact that the child has an attitude of defensiveness or suspiciousness which may show itself in other ways.

"Feeding Problems"

Many of the so-called "behavior problems" that arise in connection with the rearing of children represent problems of feeding, sleeping, and elimination. In one study (Jersild, Woodyard, and del Solar, 1949), in which 500 parents reported pleasures and problems connected with the having and upbringing of children, it was found that difficulties with "routine care" constituted the second largest group of problems reported by the parents.[21] When all the various problems reported by the parents were classified according to age level of the children, it was found, as might be expected, that the problems relating to "routines" were relatively more prominent in infancy and early childhood than in later childhood years. However, even up to the age of twelve many parents reported problems in this category.

Most frequent among the problems under the heading of everyday care were problems of feeding. Second in frequency were problems of sleep; "dress, grooming, personal adornment" stood third in frequency; this was followed by a category containing problems of elimination (most of these had reference to bladder control).

Nearly all children present their parents with a feeding problem at one time or another, especially after they have been weaned and are taking an active hand in choosing what to eat and how to go about it.

The problem may range from behavior that is only mildly perplexing to behavior that produces severe annoyance or anxiety in the parent and that represents serious trouble for the child. Very often the feeding problem is a problem because the parent regards it as such and not because the child actually is getting too little food, or is demanding the wrong kind of food. Often the feeding problem is not primarily a problem of feeding but a symptom or consequence of other difficulties in the child's life.

Whatever may be the circumstance, however, difficulties con-

[21] Other details of this study are reported in Chapter Nine.

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nected with feeding are among the most prominent practical problems that occur in the upbringing of children. There are, of course, several reasons for this. Food in proper amount and kind is so necessary for health and growth that parents are much concerned about it. The child, on his part, rebels against the prodding and prompting and occasionally resists the rules, standards, and restraints that surround any human being who is bent on getting some food into his stomach. Many children also learn at an early age that the feeding situation is the Achilles' heel in the parent-child relationship. They learn that the feeding situation provides an effective means of gaining attention, of showing rebellion or resistance, of asserting themselves as independent persons.

A list of the forms that feeding problems may take would fill a heavy volume. The following list includes only a few of the more common everyday complaints: The child is a light eater; he takes too much of one kind of food, too little of another; he refuses to take his quart or pint of milk a day; he will not take milk unless it is mixed with coffee and sugar or unless he can have coffee as a chaser; he will eat dry cereal but not cooked cereal; he will eat hardly any breakfast; he eats lightly at mealtime and then wants to nibble between meals; he scarcely touches his own meal and then cadges the food of others; he refuses a bit of food, then demands it, then rejects it when it is brought; he asks for food which takes time to prepare and then when it is ready he does not want it; he instigates mutiny and disaffection among younger siblings by voicing his dislike of food that is being served; he groans when he sees the main dish for supper so that the family may begin the meal on a gloomy note; he wants to eat with a big fork, then demands a small one; he fills his mouth too full; he retains food in his mouth at length without chewing or swallowing; he bolts his food; he dawdles; when food is passed he fingers several pieces before making a choice; and so forth.

Many of these examples are trivial in character. The problem becomes more serious when the child, in the judgment of the parent, is not regularly obtaining an adequate and balanced diet over a period of time.

In many cases parental concern over a child's feeding behavior is complicated by the fact that some children who had voracious appetites at the age of one or two seem to want too little food at the age of three or four. Some children around the age of four seem to require less food, even though they are now bigger, than they required at an earlier age when their rate of growth was more rapid. Moreover, as a child grows older he may revise the timing of his food intake. A child who is just beginning to go to school, for example, may take very little breakfast but eat heartily at suppertime. Many children react to the tensions aroused at school by eating light breakfasts. Another youngster may distribute his food intake more evenly among the three meals.

The factors that produce a "feeding problem," whether it is a genuine difficulty or a problem because the parents so regard it, are as varied as are the problems themselves. There is space only to indicate a few of these factors. The difficulty may reside in the child himself: His health may be poor or he may be suffering from allergies and the like. The difficulty may be influenced largely by the child's emotional condition: His feeding behavior may be adversely affected by conditions within or outside the feeding situation that have led him to be anxious, hostile, or resistant. The difficulty, on the other hand, may occur largely as a result of the emotional condition of the parents: They, on their part, may be anxious or hostile, ready to take offense, impatient, overly insistent that the child be obedient and good. The difficulty may be due in part to the fact that parents expect too much of the child and, as a result, become impatient if the child is clumsy or takes extra time or seems to be slow in learning the niceties of table manners and the like. Again, the difficulty may be due in part to the fact that parents have rigid or mistaken notions as to how much a child should eat.

The problem may be influenced by local, stereotyped prejudices or rules which the parent may never have thought out from a nutritional point of view. Rules of this sort may vary from one locality and even from one moment to another. Thus, there may be the rule that a child should not eat meat unless he also eats potatoes; there may be the notion that cheese, peanut butter, and jam are never to

be eaten and enjoyed by themselves but must always be spread on a piece of bread; dessert is conceived of as a reward and not as a part of the meal; the child is allowed to have no second helpings of anything until he has finished everything that was set before him; there are certain things meant only for adults (so it is claimed) and it is morally wrong for a child short of college age to touch or taste them.

While children's food getting often is complicated by such arbitrary rules and prejudices, it does not follow, of course, that good management of children's feeding always requires that the parent give in to the child. For practical reasons, if on no other grounds, it becomes necessary to insist upon a certain amount of regularity in eating hours, to limit between-meal snacks, and to see to it that the child, as he grows older, does not use table manners that are discomforting to other members of his household and that would make him an unwelcome guest in other homes.

Sleeping

In the newborn child, periods of complete wakefulness tend to be briefer, and periods during which the child is fully asleep seem also to be considerably briefer than is the case later on. As time passes, periods of wakefulness increase in length, especially during the daytime hours, and periods of uninterrupted sleep likewise increase. The total amount of time spent in sleep also diminishes, although with many fluctuations. If placed on an arbitrary schedule of feedings which does not correspond to his own spontaneous demands, the child often must be awakened to be fed, and sometimes such a child will refuse to nurse or take the bottle, or will do so while remaining in a rather sleepy state.

Table II shows the approximate average amount of time spent in sleep by a number of children at various age levels from one month to eight years. The averages are based on results for all seasons combined and are therefore approximate, since the amount of sleep varies with the seasons, being greater in winter and smaller in summer. The table is based on studies by Foster, Goodenough, and

TABLE II

AVERAGE AMOUNT OF SLEEP PER DAY AT VARIOUS AGE LEVELS[22]

(The values represent averages for all seasons combined)

Age	*Hours*	*Minutes*
1–6 months	15	3
6–12 months	14	9
12–18 months	13	23
1½–2 years	13	6
2–3 years	12	42
3–4 years	12	7
4–5 years	11	43
5–6 years	11	19
6–7 years	11	4
7–8 years	10	58

Anderson (1928), who, through the cooperation of parents, obtained about a thousand records of children's sleep for each day of a week during each of the four seasons of the year. Table III shows the average amount of time children aged eight to eighteen spend in bed, as reported by themselves.

The records on which Table II is based showed large individual variations at all age levels. Below the age of one year, there was a

TABLE III

AVERAGE AMOUNT OF TIME SPENT IN BED FROM 8 TO 18 YEARS, AS REPORTED BY CHILDREN THEMSELVES[23]

Age in Years	*Hours*	*Minutes*
8–9	10	42
9–10	10	13
10–11	9	56
11–12	10	00
12–13	9	36
13–14	9	31
14–15	9	06
15–16	8	54
16–17	8	30
17–18	8	46

[22] From *The Sleep of Young Children* (Minneapolis: University of Minnesota, Institute of Child Welfare, 1930), Circular No. 4, 11 pp. Reproduced by permission.

[23] From L. M. Terman and A. Hocking, "The Sleep of School Children," in *Journal of Educational Psychology* (1913), 4:138-147, 199-208, 269-282. Reproduced by permission.

difference of more than three hours between the 10 per cent of children who slept most and the 10 per cent who slept least. Up to the age of four years, the corresponding difference was more than two hours; and from four to eight years, the difference was more than an hour. The differences between individual children at the two extremes were decidedly larger.

In dealing with young children it is well to remember (but often quite difficult to keep in mind) that children show wide differences in the amount of sleep they require. Translated into practical terms, a difference of two hours in the sleep needs of two children who get up at the same time in the morning, and who have similar naps, would mean that if one child is put to bed at seven in the evening, the other might stay up until nine. Again, it may mean that a two-year-old who happens to require less sleep than the average may get along with less sleep than is required by a four-year-old who happens to require more than the average. Actually, of course, it would be hard to judge just what a child *requires* and just what would be optimum, but the practical importance of recognizing individual differences still remains.

Many difficulties are involved in obtaining measurements of time spent in sleep as a basis for practical recommendations. Even a careful observer will have difficulty in telling whether a child whose eyes are closed actually is asleep.

Apart from this difficulty of determining the time actually spent in sleep, there is the difficulty of determining the "natural" sleep needs. A healthy infant, left free to sleep whenever he wants to, without interruption, does not present a problem on this score; but the problem arises as a child grows older. For one thing, the amount of time an older child spends in bed is governed to a large extent by conventions. It is possible that some children are prevailed upon to stay in bed longer than is necessary, but it is no simple matter to let the runabout child control his sleep schedule according to his own "natural" demands, for many happenings in his environment may conspire to keep him awake when he normally would become drowsy (such as boisterous play and excitement) and to keep him from becoming "slept out" (such as the bustle of the household, the

barking of dogs, and the demands of the home and school schedule). The difficulty in this connection is exemplified by the fact that as children grow older they desire more and more to stay up late in the evening, and at the same time, more and more of them have to be called in the morning. The difficulties of "natural self-regulation" of sleep are even greater in the case of children whose equilibrium is disturbed by malnutrition, illness, digestive difficulties, or other bodily disorders. Such disturbances may make a child wakeful when he is much in need of sleep.[24]

Lacking full information as to a given child's natural sleep needs, conscientious parents generally lean toward the view that the more sleep a child can conveniently get the better it is for him, and they try to govern his schedules accordingly. They are likely to be all the more inclined toward this by reason of the fact that once the child is asleep, he is no longer underfoot and the parents' hard day's work will soon be done. However, in trying to make sure that the child gets plenty of sleep, parents sometimes invite needless trouble. By insisting that the child go to bed early they may simply be depriving themselves of sleep, for the earlier the child goes to sleep the earlier he is likely to awaken them in the morning.

Studies of children's sleep demands have yielded certain findings that parallel some findings with respect to children's spontaneous food demands. Reynolds and Mallay (1933) observed the sleeping of thirty-four children who, for several weeks during the summer, spent the twenty-four hours of the day in a nursery school. The respective number of hours spent in sleep, including naptimes, by two-, three-, and four-year-old children was twelve-and-a-half hours, eleven hours and twenty-three minutes, and ten hours and fifty-seven minutes. These averages parallel but are somewhat lower than the averages found for the same ages on the basis of mothers' reports, during the summer season, in the study represented in Table II. The average child spent an hour in bed before falling asleep. (This item should be considered against the fact that the time was summer and that there were many other children sleeping in the same building.)

[24] Sleep disturbances because of unpleasant dreams are discussed in Chapter Fifteen.

The children showed wide variations in amount of sleep from day to day. However, when results were computed in terms of longer periods, such as two or three weeks, it was found that there was a high degree of constancy in the amount of sleep taken. This phenomenon, it may be noted, corresponds to what has been found with regard to children's eating—a child may show wide short-term fluctuations in the times when he is hungry and in the amount of food intake, and yet show a high degree of stability when trends are measured in terms of weeks rather than hours or days. It was likewise observed that if for one reason or another a child lost a good deal of sleep during one day, he did not promptly counterbalance this by sleeping that much more the following day; rather, he made it up over several ensuing days.

Daytime naps. The reduction in total amount of sleep during the twenty-four hours is brought about, even during the first weeks after birth, mainly by a decline in amount of time spent in sleep during the daytime hours. With this there is an increase in the length of uninterrupted sleep at night. In many children, an early morning nap, following a feeding early in the morning, and a late evening nap that they once took become merged with nighttime sleep. Along with this trend, periods of wakefulness during the day lengthen and become more clearly set off from periods of sleep, leaving a late morning and an afternoon nap. In the second year, the afternoon nap may remain while the forenoon nap is eliminated, but individual children vary in this. After the second year, inroads are likewise made on the afternoon nap, again with individual variations.

An afternoon sleep period is usually a part of the child's daily schedule at about the age of two. Many children continue for some time to sleep during this period; others tend more and more to remain wakeful during part or all of it. As described by Sherman (1930), "The child learns to stay in bed a certain amount of time." In the study by Reynolds and Mallay (1933), it was found that many children drop the daytime nap on an all-or-none basis instead of gradually tapering off, and some children either continue to sleep during the nap period or at a certain point discontinue nap-time sleep altogether.

The findings with regard to children's own daytime sleep behavior do not support a policy of fixed standards, similar for all children. The problem of managing sleep and rest periods remains a puzzling one during preschool years and on into adult life. It may be much to the child's advantage to get him to acquire the habit of taking rest periods during the day, whether or not he falls asleep during those periods. One thing that is much needed by many older children, as well as by many adults, is a habit of relaxing completely during the course of the day's activities.

Studies of fatigue and rest have shown that brief rest periods may have more recuperative value than the equivalent amount of time spent in one long rest period. The ability to relax, and even to doze off during free moments between strenuous activity, would be a boon alike to older children and adults. It does not appear that this happy faculty is fostered by a sleep regime which, from preschool years and onward, is governed more by conventions and the clock than by the child's own varying needs from day to day and even from hour to hour. One obvious difficulty is that practical arrangements, both at home and at school, require a certain amount of regularity of schedule; the competition of other demands makes it difficult, first to gauge a child's natural demands and, second to adapt his schedule to such demands.

Some problems connected with sleep. Problems connected with children's sleep range from problems of practical management to those of a complicated psychological nature. The problem of children's sleep is intertwined also with the problem of adequate rest and sleep for the entire family. If the child is a poor sleeper, or has irregular bedtime habits, or is faced with conditions that disturb his sleep, other members of the household are likely to suffer along with him.

Children's sleep is, of course, affected by anything in their everyday lives that disposes them to be excited or relaxed, tranquil or disturbed. Children's sleep may be much affected by their fears. Again, a child's willingness to go to bed and to slough off his daytime preoccupations may be affected by the extent to which he is friendly and at peace with other members of the household and

the extent to which he is resistant and hostile. It is not only the painful or hostile emotions that may make inroads on sleep. An alert, interested child, happy in his surroundings, may also try to remain awake as long as he can.

Many children establish quite a bed-going ritual. There may be a series of songs that must be sung, verses that must be said; the child may need not one but several drinks of water; the shade must be adjusted just so; dolls or other possessions must be settled in the right place; for good measure, the child may demand an extra bit of "scratching." When all this has been done, the parent may be called back again for another round on the plea that a detail has been forgotten or that the youngster has a new bit of information to tell about or a new question to ask. Some children become extremely fertile with serious ideas that need discussion just when bedtime arrives.

Tactics such as these, which have the effect of delaying the last goodnight, serve many functions in the child's life. For some children, bedtime may be the time of day when the child and parent are most warmly and comfortably responsive to each other. If a child is afraid, this ritual may serve the purpose of staving off the moment when he will be left to himself. It may be a period during which he assures himself of the companionship and friendliness of his parent. If there are several children in the family, and each is tucked in separately, bedtime may be the only time when the child feels he has the parent all to himself. Sometimes confidences are shared, sins are confessed, fears are revealed, pains which have worried the child are described, and much else that has been hidden is brought to light. The older child, who long since has outgrown his crib and who sturdily objects to being babied during the day, may now allow himself to be babied. After the age of five or six, bedtime is the main time of day (and maybe the only time of day) when some children are in close and intimate communication with their parents. Different children use this time in different ways. One wishes to talk. Another desires a story. One begins to drowse at the end of the bedtime prayer, another at the end of a lullaby. Still another asks, as a final goodnight gesture, that his father or mother get him a

little snack from the icebox. But the words that are spoken, the details of a ritual are not so important as the meanings they are charged with.[25]

While preparing for sleep some children take occasion to rehearse operations that are important features of their development. They practice their language and powers of conversation; at the period when they are becoming able to memorize and to sing songs, the bedtime ritual may be a time of going through these.

As a child grows older, especially after he has learned to read, has become interested in radio and television programs, or has acquired other persisting interests of his own, he may try to establish a bed-going routine that is quite different from the foregoing. Instead of seeking to prolong the attention he is receiving from his parent, he may try to get rid of it, especially if he has a radio or television set of his own.

More serious from the point of view of the parents in many ways than the maneuvers of a child who is trying to delay his bed-going is the problem of the child who falls asleep and then becomes wakeful during the night. Such a child may demand that the ritual of bed-going be repeated, or he may ask to get into bed with one of his parents. He may complain of noises that scare him or of aches and pains that bother him. The simplest explanation of such wakefulness may be that the child is being kept in bed longer than is necessary: He may be wakeful at night because of a long daytime nap or because he has been asleep since early in the evening. However, such wakefulness is more serious if it is due to a physical disorder or to emotional distress, such as fear, or uncertainty about the good will of his parents. It is better, in such a case, to try to discover the underlying difficulty than to deal with the problem as primarily a problem of sleep.

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[25] It is interesting to note that many children contine to cherish and recite prayers and lullabies of early childhood long after they have reached an age when they have put aside other childish things. Even when they are adults, these echoes of childhood may recur to them when they are deeply moved, filled with gratitude, or about to enter upon a solemn undertaking, such as going under ether for a serious operation.

Elimination

Children and parents alike would be spared much trouble if infants were housebroken at birth. As it is, the development of bladder and bowel control is a relatively slow, often laborious process, entailing much labor on the parent's part and frequently a good deal of emotional complication as far as the child is concerned. Control of elimination requires the ability to inhibit processes that are completely involuntary at the start, and it involves the control of muscle groups that are obscure and unseen. As in other aspects of the child's development, it is important to scale the child's training to his growth. At the start, the child lacks the nervous mechanism for voluntary control and would be unable to control his elimination even if, by some freak of nature, he had a desire to do so. When training in bladder control is timed and adapted to the growth pattern some children require hardly any training. Unless other complications enter in (such as illness, or chronic emotional disturbances), the child is eager, in his own good time, to get the dry habit.

Progress in the Control of Elimination

Many features of the child's progress in gaining voluntary control have been described by Gesell and Ilg (1937). These investigators draw an interesting parallel between control of the eliminative processes and the development of voluntary control of movement. They point out that the power to release deliberately an object held in the hand is acquired rather slowly. In early infancy a child's grasp reflex is activated when objects are brought into contact with the palm of his hands. He is not able, at will, to release this grasp and let go of the object. It is not until the end of the first year that a majority of infants consistently are able to let go when in the act of trying, for example, to drop a small block into a container. They further point out that an equivalent control of the tonus of the bladder sphincter may in some respects be more difficult. Accordingly, a child's failure to respond to training may be due to the

immaturity of the sensorimotor mechanism, rather than to perversity and resistance.

For a considerable time, the infant's "bladder control" is largely a control exercised by the vigilant parent who anticipates voidance of the bladder before it occurs.

During the first part of the second year, while the mechanism for control of the bladder is being perfected, the child is also undergoing the process perfecting his postural control. Gesell and Ilg describe how complications may arise in coordinating the two. Placement on the toilet seat may produce tensions that result in the withholding of urine, and then the child may promptly urinate when removed from the seat.

The fact that progress in bladder control is tied to the process of maturation is indicated in a study by McGraw (1940). Observations were made of two pairs of identical male twins. The observations began when the twins were about a month old and continued for well over a year. One twin of each pair was given systematic "training" on four days each week by being placed on the toilet receptacle every hour.[26] Records were kept of the number of times the bladder was emptied in the receptacle or elsewhere and the measure of achievement was the percentage of times it occurred in the receptacle. The other twin in each set was not allowed to use the toilet facilities until, respectively, at about the age of fourteen and a half and twenty-four months.

The effort spent in training the one member of each pair did not yield corresponding achievement. One of the untrained twins, when introduced to the laboratory pot at 430 days, came to within ten percentage points of the success ratio of his brother who had had hourly access to the chamber four days each week since he was twenty-three days old. The untrained twin in the other pair was first introduced to the laboratory pot at the age of two years. At this time his achievement was about the same as that of his brother who had had the pot as a daily companion. Indeed, this "untrained"

[26] It would require further study to determine whether training might have been more effective if a more flexible schedule had been used.

boy, who had not been allowed by his mother (in cooperation with the investigator) to use a toilet chamber at home, earned nearly a perfect score from the time when, at the ripe old age of two years, he first had a chance to use the toilet.

The two twins who received "training" did not show steady improvement. Instead, their performance showed interesting ups and downs.[27] Both began with fairly high initial success,[28] followed by slumps and rises which reached their lowest level in the period when both babies were about six to ten or eleven months old. Following this, around the first birthday, there occurred an increase in successes, followed, in turn, by declines. This gain in control, according to McGraw (1940), marks the time when intelligent participation in the process is becoming possible.

The fact that a child is in the process of acquiring the power to control what originally was an involuntary act may be marked not only by the knowledge that he uses the toilet chamber successfully but also by other signs. Signs of awareness appear when the child apparently notices the tinkle, appears to realize that the sound effects originate with him, shows interest in puddles, and is responsive to the use of a word or sound to designate the act of urination. "Even a glint in his eye may reveal his awareness of the act" (although the happy event is perhaps more likely to be greeted with a glint in the eyes of his parents).

However, the first flush of success in control does not necessarily mean that the child will go on from victory to victory or even that he will maintain his level of success. There may be regressions, arising from many circumstances. One child may stay dry consistently, another may fluctuate. Not only will the child's consistency of control be influenced by factors pertaining to bladder control as such but also by other events in his life. He may become so absorbed in play that he chooses not to be diverted. Even if he heeds

[27] Records of intervals between urination, kept during one day each week with all four children, did not reveal any consistent "rhythms" such as parents have frequently been advised to capitalize on.

[28] This initial success was explained on the ground that the reflex mechanism governing micturition is quite sensitive to stimulation during the first couple of months.

the call of nature he may wet himself because he does not give himself enough time. The development of locomotion and the other motor performances and the development of speech may cause him to backslide, for he may be so intently absorbed in trying out his new powers that he can't be bothered.

Definitive statements as to when the child may be expected to assume full responsibility in these matters cannot be made because of individual differences in children and because of differences in the circumstances in which their training occurs. The bladder control of a two-year-old is likely to lapse at times, and many children do not achieve control until well beyond the age of two. Some who turn out to be fine citizens do not achieve control as a regular habit until the age of three or even four or five. The "norms" for bladder control, as reported by different investigators, show much variation. Moreover, a child may achieve rather consistent control and still occasionally wet himself, or wet his bed at night, for several years thereafter.

Daytime control usually precedes nighttime control. A large proportion of children have pretty well acquired the "dry habit" during the day by about the age of two and a half, but it may be another year before the two-and-a-half-year-old who keeps dry during the day is equally in control at night.

After the child has established control, much time may still have to elapse before he is capable of self-help in going to the toilet and in managing his clothes. This is especially true if the fixtures and his clothing are unsuited to his limited abilities.

The foregoing statements deal mainly with bladder control. Control of the bowel usually is established more readily. In the healthy child, bowel movements are more regular and considerably less frequent; they can be anticipated more accurately and at an earlier age than can voidance of the bladder, thereby facilitating the learning process of associating a movement with being placed on the toilet. In this function, however, there are again large individual differences. Bowel control, and attitudes associated with defecation, may be complicated by parental attitudes and practices, such as disgust, a policy of compelling the child to sit on the pot for long

periods, a policy of making excessive use of suppositories and laxatives, and other practices.

Lapses, hindrances, and later progress. Even after a child is in the habit of letting his needs be known there are likely to be many lapses.

Moreover, a boy is likely from time to time to experiment with his aim and trajectory. A young boy would have to be quite a lethargic character if he did not sooner or later experiment in this way, for his penis is so handy, so conveniently within reach, so accommodating, and yet resistant. As this organ goes through phases of tumescence (erection) and detumescence, it is as though it had a personality of its own. Nature has so placed and formed the genital organ of the young male and made it so attractive to manipulate that it fairly beckons to him. This fact adds drama to the homely occupation of emptying the bladder and the sober task of gaining voluntary control over this process of micturition.

Parents sometimes become rather discouraged when a child who seems well on the way to complete control of the climinative functions backslides. The child himself may feel ashamed, so that when accidents occur, he may try to conceal them, or lie about them, blaming the mess on others. Children have been known to blame Grandma or even aged family dogs for puddles of their own doing. Lapses in bladder control are so common that they should be regarded as a normal feature of the child's advance. The child's performance is likely also to be affected variously by many other factors, such as teething, illness, temperature, consumption of liquids. Even after several years of consistent control a child may relapse under trying conditions. Some children, for example, again wet their beds when they begin to go to school, apparently as a symptom of strain or fatigue. The fact that stresses in a child's life may produce a greater than usual amount of incontinence has been reported in investigations of British children who were evacuated from city to country places during World War II (Burt, 1940).

That the shame a child feels in connection with lapses in bladder or bowel control sometimes makes a deep impression is shown by

the fact that some adults mention such experiences as among their earliest memories.

In time, many children learn to exploit the processes of elimination as a means of gaining attention from adults. In a study by the writer and an associate, a young nursery-school child, who much preferred the company of adults to that of children, quickly discovered that he could gain his ends by asking to go to the toilet. During one fifteen-minute period, he slyly managed to go to the toilet four times, once with each of the four teachers and assistants who were in charge of the group. A child will sometimes revert to incontinence when a new baby arrives in the family and his motive sometimes, it seems, is to draw attention to himself, although this is probably not the only explanation. It is, however, a kind of poetic justice when a child of two or three or four years wets and soils himself when a new baby comes to the family and attracts the attention he used to receive: His wetting and soiling call attention to the fact that he, too, is yet but a baby, even though he is so big and looks so mature compared with the little newcomer.

Attitudes with Regard to Elimination and Genital Organs

In due time, in our culture, the process and the organs of elimination become enveloped in an atmosphere of furtiveness, secrecy, and shame. There is the realistic fact that the excrements are not pleasant and the wetting and soiling cause discomfort. At first, the child himself does not seem to be squeamish about contact with urine and feces; on the contrary, he will play with his excrements in a manner that is quite disgusting to some adults. But in time the child himself shows distaste, and this probably is a natural development, in the sense that he would learn by himself, even if not vigorously taught by others, to recognize excrements as something uncomfortable and unpleasant to be in contact with. (It may be noted that many animals, whose manners are not too polite in other respects, become quite fastidious about contact with their own waste products: The pig carefully deposits his in a separate part of his pen;

the grazing calf leaves a little ring of uncropped grass around droppings in the pasture—unless grass is quite sparse.)

It is seldom, however, that the child is left alone to acquire an aversion to his waste products or an attitude of secrecy and shame with respect to the processes of elimination. Adults and older children usually are very much on the alert to hasten the development of such attitudes. The processes of elimination become, for many children, associated with uncleanness, sexual connotations, the shame which in many families is connected with nakedness, and the guilt which quite widely in our society is connected with sex.

The attitudes of squeamishness, disgust, and shame, that some children acquire extend far beyond what is required or justified on practical counts of cleanliness or on moral grounds. The tendency to regard the process of elimination and the organs connected with elimination as obscene is so strong in some communities that even the children whose parents are least prudish and rather free and outspoken in the home pick up some of the prevailing attitudes in the community and, as they become older, such children may admonish their parents not to use such "dirty" words or to be so shameless about nakedness or going to the bathroom so openly.

The Concept of an "Anal Phase" of Development

Earlier we mentioned that according to one theory of development during infancy the sensations arising when inner membranes in the mouth region are stimulated through sucking and mouthing are erotic in character and that, according to the same theory, sensations connected with voiding of the bowel and the passage of urine through the urethra also have an erotic quality.

In connection with this concept of an anal phase of development there also have been theories to the effect that emotional problems will arise and unfavorable character traits may become established if the child suffers from severe frustration and deprivation in connection with his efforts to satisfy his anal interests. According to this view, if parents put severe pressure on the child, try to hurry him (in the development of control over the process of elimination), and if they are harsh, punish him, treat him coercively, they are

seriously interfering with the pleasure he normally would get from his bowel movements and the child will react against such treatment. He may acquire a tendency to limit all his primitive pleasure-seeking activities. In extreme cases he may come to lose spontaneity and regard freedom as dangerous, and he may become saddled with character traits, which bedevil him as he moves from childhood into adulthood, taking the form of such self-restricting characteristics as stinginess, acquisitiveness, and a tendency to be punctual and meticulous and to assume a punitive attitude toward self or toward others.[29]

What position should we as students of child psychology take with respect to such views as these? The answer, in the writer's opinion, must be given along the same lines as our discussion of the theory of "oral eroticism." There is a close physical association between sex and elimination, but this association does not provide an adequate basis for understanding the full significance of the child's experiences with elimination and toilet training. We can recognize also that the young child goes through periods when he is intensely interested in the process and products of elimination and he undoubtedly gets pleasure from voiding himself. Whether this pleasure should be regarded as erotic, related in some way to the development of sexuality, is not in itself a crucial issue. We may note that the linings of the mouth, rectum, and sex organs have grown from the same primitive tissue and so these regions have at least that much in common. The important issue, however, is that anything which occupies the child's time and attention, and absorbs his interest and his energies, is a significant thing in the economy of his development whether or not we choose to say that it is erotic in character. Moreover, anything about the child which occupies the attention of his parents, anything which presents an issue in his relationships with others, and anything which is a focal point of important dealings they have with him and the target of blame or punishment is of great significance when seen from the general point of view of the child's total development.

[29] For a discussion of this subject, see Orlansky (1949), Fenichel (1945), Despert (1944), Huschka (1942), and Fries (1947).

It is possible to note many important currents in the child's life and his relationships with others that might swirl for a time around the processes of elimination and the organs and activities and experiences associated with these processes. To see the significance of these we must assess them as features of the total environment which the child must face.[30]

First we may note that toilet training is, for many children, a very important feature of their early discipline. If a parent is ordinarily accepting, kindly, and gentle in his relationships with the child, he is likely to show the same qualities in connection with the child's toilet habits. If he is harsh in his attitude toward the child it is more likely than not that he will be harsh in dealing with the child's bladder and bowel control. If he is strongly competitive in his approach to child rearing it is likely that he will wish the child to hurry to get the dry habit and prove himself in this humble enterprise, as in other activities, to be better than the next fellow. If he is a self-accepting kind of person, able to abide the demands of his own nature, without ascribing filthy and self-demeaning implications to the fact that his bladder gets full and that his bowels need to be emptied and without deploring the "lower" part of his nature (and thereby repudiating himself) the likelihood is that he will view the operations of his child's bladder and bowels in the same light. But if he is a self-rejecting kind of person, a person who holds himself above the ordinary demands of nature, it is more likely that he will view his own and his child's bodily functions with impatience.

In like manner, a parent's attitude toward the child (which usually reflects his attitude toward himself) will express itself in the position

[30] The position which is here presented and which is in keeping with several studies in developmental psychology cited earlier in this chapter has been presented very forcibly, as it relates to the concept of anal influences, by Horney (1939). Horney explains so-called anal character traits in terms of the total social situation in which the child lives. According to her, "anal" traits must be understood as a response to the sum total of experiences in the early environment. A person does not have tight lips because he has acquired a tight sphincter; if both are tight it is not that one has caused the other but that both express a more pervasive tendency in a person's character, namely, to hold on to what he has and never to give away anything. Observations by Bostock (1951) are in keeping with the position that the type of toilet training a child receives will be influenced by the extent to which he is wanted and accepted.

he takes with regard to these homely functions. During the time when the child himself is most preoccupied with the eliminative functions, and when the expectations of others also are centered on his progress toward self-control in this area of his bodily functioning, the child's toilet habits can become the focal point of acceptance or rejection. The child may be tolerated and warmly loved whether or not he soils himself, or he may be scolded, punished, and put to shame.

In other words, bladder and bowel activities become the channel of significant communications between the parent and the child. To punish the child for soiling himself is not simply a way of interfering with anal satisfactions—it is a way of punishing the child, not simply a part of him. To call him dirty and filthy and smelly and to view his excrements with abhorrence and disgust and to do so regularly and with pointed emphasis is, in effect, a way of telling him that he is a filthy and vile character. To shame him for wetting himself is, in effect, to communicate to him that, in the eyes of his parents, he is a shameful person. In other words, through the avenue of the kind of attitudes parents show toward a child's processes of elimination, they are expressing feelings and impressions which are a part of the total interpersonal communication system that affects the child's emerging ideas and attitudes concerning himself.

In like manner, if the child, for reasons arising out of his relationships with his parents, has a tendency to be ashamed of himself, to view himself as a rather unattractive and unlovable figure he, on his part, may hit upon his tendency to wet or soil himself, or even his need to void himself, as something about him that is unpleasant and objectionable even if the parents from whom he has gotten this view of himself do not happen to have used harsh or humiliating methods in dealing with his toilet habits. From a rather early age some children show more self-reproach and disgust than others with regard to puddles and messes they have made, and this difference probably cannot be explained solely on the basis of differences in toilet training. Long after children have passed through the phase when they are acquiring control over their bladder and bowel, they differ markedly in the extent to which they feel embarrassed if they

have an "accident" or if they have to break away from a group at an inopportune moment to heed a call of nature. One will excuse himself without hesitation; another may suffer agonies rather than let on that he needs to empty his bladder. When a child is acutely embarrassed about his need to void himself, it is likely that he will be embarrassed about other aspects of himself, and that all of these disparaging attitudes toward himself have a common origin which is broader than simply the early experiences he had in connection with the process of elimination. Again, if a child is very impatient with himself and puts heavy demands on himself as far as continence is concerned—refusing to go to the toilet because he went just an hour or two ago and so ought to have the strength of will to "hold out"—it is likely that he will place severe demands upon himself in other respects.

Early Phases of Sexual Development

The child's sexual development begins before birth and the beginnings of sexual behavior occur soon after birth.[31]

A large number of children at an early age show through their behavior that the genital organs are more than just passive appendages associated with the process of elimination. Infant boys have the experience of tumescence (resulting in erection of the penis) and detumescence. In a study by Halverson (1940) of nine male infants aged three to twenty weeks it was found that tumescence occurred at least once daily in at least seven of the nine and that, in individual children, it might occur from four to over thirty times during an eight-hour period. Moreover, tumescence was accompanied by restlessness while detumescence was associated with a more relaxed state.

This phenomenon does not necessarily mean that the young boy

[31] The view that sexuality appears in infancy was emphasized by Freud in his classic theories of the role of sex in human development. In studies of children during the first fifteen months, Spitz (1949a) observed that some kind of genital play occurred quite generally in children living in a normal home environment. There is reason to believe that genital play in the first year of life is one of the normal bodily activities of the young child

has sensations or feelings of an erotic or sexual nature; but it does mean, at least, that the genital organ is active and probably, at a very early age, attracts the infant's attention. In addition, parents report the fact that a large proportion of both boys and girls during the first year or two manipulate or stimulate their genital organs. Again it may be said that such manipulation should not necessarily be regarded as the equivalent of an older person's masturbation, but it does at least represent an active experience involving the genital organs. Such behavior at the infancy level, and similar behavior—sometimes accompanied by other signs of interest in sex, at the preschool level (Issacs, 1933; Koch, 1935; Levy, 1928)—may be transitory, or it may persist for an extended period of time; it may occupy a child many times during a day, or it may occur at widespread intervals. In this behavior, as in all other aspects of development, there are, of course, wide individual differences among normal children.

In a study of two groups of nursery-school children by Dillon (1934), note was taken of children's behavior with respect to the genital organs. In the younger group (median age of 35 months), handling of the genital organs was less frequent than in the older group (median age of 51 months); it was shown by fewer children, took place more openly, and in most cases was more fleeting than in the older group. Such play was shown by seven of the twenty-two younger children and eight of the sixteen children in the older group. The children who gave more than passing attention to this play tended to show more tenseness in other aspects of their behavior than did the other children. The behavior did not seem to be stimulated materially by nakedness, the presence of both sexes, or elimination; rather, it appeared to be related to a state of emotional tension. At no time was a child observed trying to conceal such activity or showing guilt or shame. Several children were observed to show an interest in the genitalia, the anus, breasts, navel, and other organs, much as they might show an exploratory interest in other events that caught their attention; but a few children showed an interest in the opposite sex that did not seem to arise simply from curiosity as to physical appearance.

Such facts as these have obvious practical implications. Through failure to recognize that such phenomena as the foregoing are common and are a normal feature of development, some parents become unduly alarmed. If parents apply severe restraint or punishment, or obviously show an attitude of squeamishness or revulsion, they may have a very unwholesome effect on the attitudes which the child acquires. This aspect of development should neither be treated more roughly nor as something requiring more extreme delicacy than other aspects of development. By a display of their own irrational attitudes, parents may stimulate the child's interest or induce unwholesome feelings of anxiety, and impulses and behavior tendencies of the child which the parents deplore may become stronger rather than weaker.

Actually, a large proportion of children who stimulate themselves abandon the practice of their own accord or after a few matter-of-fact promptings, just as a large proportion of children suck their thumbs for a time and then stop. Many children appear to have an active interest in matters relating to sex for a time, then seem to lose interest, and, later, show a renewed interest.

The sex organs are likely to come to a child's attention in other ways. Sooner or later he will notice anatomical differences between the male and the female.

Many youngsters, once they have noticed the difference between the sexes, are quite interested. Moreover, if the child is interested but is hindered through the prudery of his parents, he may even at the early age of two or three become quite furtive in his efforts to satisfy his curiosity by peeking or trying by stealth to obtain a view of the naked human body.[32]

The children in the nursery group aged twenty-seven to forty-two months, mentioned above, gave little evidence of a clear differentiation between the sexes, but children in the older group all showed some consciousness of sex differences. Not all the older children,

[32] Some have maintained that the child's discovery of the differences between the genital organs of the two sexes produces a severe emotional shock and leads to feelings of anxiety or hostility or a mixture of both (Levy, 1940). However, ordinary observation, as well as systematic study of normal children, indicates that such reactions are not typical (Conn, 1940).

however, had a clear recognition of physical differences. Some would recognize differences in clothing and costumes, never fail to apply the words "boy" and "girl" correctly, and yet apparently regard the male sex organ as an incidental possession which girls did not have rather than as an essential distinguishing characteristic.

Apart from the foregoing, the early appearance of certain forms of behavior relating to sex is an interesting illustration of the developmental principle of anticipation which was noted in Chapter Two. Developments relating to sex are so forehanded that even as an infant in his crib, more than a dozen years in advance of the time when he will be able to procreate, the child first begins to manifest forms of behavior and interests that anticipate his role as one destined by nature to reproduce his kind.

Sex and Parent Child Relationships

One Freudian theory that some psychoanalytic groups continue to hold on to, while others reject it or use it in a greatly modified version, is the theory that there is a phase of sexual development during which the child's sexual interests become centered on the parent of the opposite sex. Such a sexual attachment to the parent has come to be known as the Oedipus complex or the Oedipus situation, and the period during which the child has this attachment and is in process of resolving it has been called the Oedipal stage or phase.[33] According to the theory, the child becomes jealous and would like to have full possession of the parent of the opposite sex. There may be many complications, such as feelings of guilt and anxiety arising as a reaction to feeling of hostility toward the parent, fear of retaliation, and a confusion of feeling, as when a boy both loves and hates his father—loves him because in most respects he is a pretty nice person and hates him because he is a rival and stands in his way. Also, according to the classical theory, a child must resolve

[33] This derived from a version of a Greek myth, according to which Oedipus unknowingly slew his father and unknowingly married his mother. While Oedipus refers to a son, and a myth pertaining to Electra represents the corresponding idea for the daughter, the term Oedipus is quite generally used to cover both the mother-son and father-daughter situation. For discussions of Freud's theories of sexual development, see Freud (1930) and Fenichel (1945).

this complex of feelings and the conflicts involved in it before he can move on to the next phase in healthy advance toward later and more mature phases of sexual development. If he does not resolve this situation he is, according to the theory, going to have a lot of trouble during the rest of his life, for even though he becomes older and takes on the characteristics of a youth and then of a man he will still be hobbled by the fact that a part of his nature is still stranded, as it were, in a childhood phase of development.

We give this brief mention to the Oedipus theory for two reasons. One is that the theory is so freely mentioned, both in scientific and popular literature, that we should pay our respects to it in this chapter. Secondly, and more importantly, we mention it because it contains, as do most of Freud's theories, a brilliant insight, even though it does not tell the full story. The theory is true in that it stresses the importance of emotional relationships between children and their parents. It is also true in calling attention to the fact that the relationship between a child and one of his parents might have an erotic element that might, in extreme cases, include incestuous desire, and, in less extreme instances, might be strong enough to keep the young person, as he grows older, from being free to regard other people of the opposite sex as desirable sexual objects. But the theory of the Oedipus complex assumes a more rigid and uniform pattern of relationships between parents and children than the patterns that actually exist in one culture as compared with others, in one family as compared with another family, and even within a single family in the relationship between a parent and one of his children as compared with his relationships with other children. There are many lines of observation and theoretical consideration which indicate that while the Oedipus complex might exist, as usually described, it cannot be taken for granted that it usually will exist.[34] The parent-child relationship is so varied that the Oedipus complex, if it exists, must be regarded as a special situation rather than as something to be expected. The broader and more basic explanatory concept is the parent-child relationship in its totality.

[34] For discussions on this point see, for example, Sears (1943), and Horney (1937).

CHAPTER FIVE

Motor Development

At an early age and throughout life a person's image of his body and its properties are important features of his conception of himself. A young child is especially reminded of his body size and his physical strength. Being small has much the same meaning as being young and dependent, while being big has the connotation of being older and having more knowledge and self-direction. Much of the child's first groping in the process of discovering who and what he is takes place in connection with a process of exploring the contours of his body, fingering and toying with his limbs, testing his reach and strength, turning and twisting, and struggling to manipulate things.

In early childhood, the child's mental and physical activities and abilities are closely interwoven. This is apparent in tests of mental ability in early childhood: Many of the items designed to test a child's ability to notice things and to comprehend relationships also involve a test of his ability to perform coordinated muscular movements.

The child's physical characteristics and his skill and strength in physical activities can be measured objectively, but they also have subjective dimensions. The subjective side includes the meaning the child attaches to the physical properties of his body and to his motor skill—the meaning these characteristics have in his view of himself, his conception of his resources and weaknesses, his attitudes toward himself, and what he and others might expect of him.

In this chapter we shall deal with some general characteristics of the child's motor development, and some achievements will be singled out for special examination. It is to a large extent by way of

his motor development that a child moves from the helplessness of early infancy toward self-help and independence. Motor activities also play a crucial role in many of his intellectual enterprises throughout childhood, and they provide the medium for a large proportion of his social contacts with other children.

Trends in Physical Growth

The average newborn child is about 20½ inches long. During the first year, his length increases by over a third, and by the age of five years he will be about twice as tall as he was at birth. During the period of physical growth, continuing changes in the proportions of the body take place. The young child's head, for example, is comparatively very large at birth and does not increase nearly as much in size as does his total stature. There is a considerably larger increase in the length of the trunk, an even greater increase in the length of the arms, and, by the time full stature is attained, a still greater increase in the length of the legs. These trends are generally in keeping with the cephalocaudal direction of development noted earlier in the discussion of prenatal growth.

Different parts of the body grow at different rates and reach their approximate maximum at different times during the period from early childhood to maturity. The same is true also of the various internal organs of the body. Not only is there a differential course of growth for different parts of the body, but also the pattern varies from individual to individual.

Locomotion

The child's first step comes as the climax of a long series of developments. The groundwork for the ability to walk is being laid long before the infant is able to stand by himself or to sit alone, or even to raise his chest from the crib in which he is lying. The first "steps" in locomotion, so to speak, are not taken with the legs but with the muscles in the upper trunk and arms.

Many achievements which mean that a child is able more and

TABLE IV

THE MEDIANS AND QUARTILES FOR STAGES IN THE DEVELOPMENT OF LOCOMOTION[1]

Description of Stage	*Number of Cases*	*Age in Weeks*		
		Q_1	*Median*	Q_3
First-Order Skills:				
On stomach, chin up	22	2.0	3.0	7.0
On stomach, chest up	22	5.0	9.0	10.0
Held erect, stepping	19	11.0	13.0	15.0
On back, tense for lifting	19	14.0	15.0	18.0
Held erect, knees straight	18	13.0	15.0	19.0
Sit on lap, support at lower ribs and complete head control	22	15.0	18.5	19.5
Second-Order Skills:				
Sit alone momentarily	22	20.5	25.0	26.0
On stomach, knee push or swim	22	22.0	25.0	27.0
On back, rolling	19	25.0	29.0	32.0
Held erect, stand firmly with help	20	29.0	29.5	33.0
Sit alone one minute	20	27.0	31.0	34.0
Third-Order Skills:				
On stomach, some progress	17	32.5	37.0	41.0
On stomach, scoot backward	16	34.0	39.5	45.5
Fourth-Order Skills:				
Stand holding to furniture	22	41.0	42.0	45.0
Creep	22	41.0	44.5	45.0
Walk when led	21	37.5	45.0	45.5
Pull to stand by furniture	17	42.0	47.0	49.5
Fifth-Order Skills:				
Stand alone	21	56.0	62.0	66.0
Walk alone	21	59.0	64.0	67.0

more to carry the load of his body can be noted from birth until he attains the ability to creep. After birth, a child will continue for some time to assume the curled-up posture of a fetus. Within the first three weeks or so the average child will be able to lift his

[1] Each median value represents the age at which 50 per cent of the children achieved the performance in question; Q_1 represents the age at which the most accelerated one-fourth of the group reached the performance; and Q_3 the age at which 75 per cent of the children reached a given stage. Adapted from M. M. Shirley, *The First Two Years: A Study of Twenty-Five Babies, Vol. I. Postural and Locomotor Development* (Minneapolis: University of Minnesota Press, 1931), p. 99. Reproduced by permission.

head and raise his chin clear of the table on which he is lying. A further advance appears as he raises his head higher, holds it up longer, and, in time, raises his chest as well as his head. In one study (Shirley, 1931), the ability to raise head and chest, while supporting the weight on elbows and forearms, appeared at an average age of about nine weeks. Such activities represent an important advance even though they may seem to have no immediate connection with creeping or walking. At twenty-five weeks, the median child of Shirley's study was able to sit alone momentarily, and at sixty-four weeks he was able to walk alone. The order in which various achievements appeared in this study is shown in Table IV.

Although there is a high degree of similarity between different children in the sequence or order of various developments, there are differences in the manner of the first movements. Some children in the study by Shirley were able to move while lying in a prone position even before creeping developed. Some could creep backward before they were able to make progress in a forward direction. A few could make progress by "hitching" while lying on their backs.

The acquisition of ability to walk alone is only a part of a larger, continuing process of motor development. As soon as the child is able to walk, he launches upon other activities that incorporate elements of walking into larger patterns of activity, such as jumping, hopping, dodging, and dancing.

Impact of Walking

When a child is able to walk he has reached an important milestone in his life. The ability to cover ground first by creeping and then by walking has an important bearing on all other aspects of his development. He is able now to increase his contacts with other people and with things. But while able to walk into new areas of interest, exploration, and adventure, he is also able to walk into mischief and danger. It becomes more of a trial for his parents to keep an eye on him. The beginning of walking ushers in a period lasting roughly from the age of a little over a year to about the age

of four, a period that is strenuous indeed from the point of view of the parent. The child is on the go, and his ability to get about and to get into things far exceeds his judgment and awareness of danger. As a result, this is a time when many parents become anxious for the child's safety, although it is also a time of increasing opportunity to enjoy the child as a companion on walks and in other undertakings.

In the first year and a half or two after children have begun to walk, many of them make greater demands on their parents' time, energy, and patience than in any other period of their lives. If not interfered with, they pull books off shelves, make off with scissors and knives; they lay hold of cigarette butts and jerk the tablecloth off the table; fall off tables and chairs and make their way up stairs and then come tumbling down; drain the last dregs from beer cans left by careless guests; eat from the dog's food-bowl and drink from the bird-bath; stroll off into brambles and poison ivy; creep under parked cars; toddle into the path of traffic; raid the ice box and make forays on the garbage pail. This is the time of childhood when a youngster is interesting when he is on the go but looks most beautiful to his tired mother when he closes his eyes in sleep.

It is also a time when many clashes of will and purpose occur, for the walk-about child is in the process not only of testing his legs but also of trying out his ability to do things with his hands, his ability to assert himself, and to pursue matters that arouse his curiosity. This is a time of great opportunity and great trial. Few parents flatter themselves with the idea that they are perfect parents during this period. Many parents experience much anxiety, especially if they already have a tendency to be anxious. But the anxiety is not just something arising from within them, for many children at this age do get into serious accidents. In many communities parents have vivid memories of reading in local papers about two-year-olds who wandered off into pools or swamps and drowned. It is true that parents fear for the safety of their children far more often than danger actually strikes. But there is little consolation for a parent who is afraid in knowing that his fears regarding accidents are not in line with statistical probabilities, that accidents will occur,

and that it would be difficult for children if the ratio between fears and fatalities are reversed.[2]

Use of Arms, Hands, and Fingers

When an adult at dinner picks up and devours the kernel of a small peanut, no one at the table with him is likely to remark or to wonder at the consummate act of skill that has just been performed. It is likely that the peanut eater himself is only half aware of his performance for he is so sure in his aim, so expert in grasping the nut with thumb and forefinger and in conveying it to his mouth. But back of this little act lies quite a story of development, beginning when the infant is unskilled in the finer movements and in coordinations between eye and hand.

Following are some of the steps in the development of reaching and grasping after the third month, as described by Halverson (1931) from a study of infants by means of motion pictures.

At sixteen weeks, the typical child, as represented by Halverson's subjects, will follow the hand of the experimenter as he places a small cube within reaching distance on the table at which the infant is seated. The infant slides his hand about on the table and keeps one or both hands on the table for a period; but he will not, as a rule, reach the cube. At about twenty weeks, the child stretches out both hands simultaneously, scratches the table, and attempts to get both hands about the cube, and if he succeeds in touching the object, he is likely to push it out of reach or simply to hold it. At twenty-four and twenty-eight weeks, he approaches the cube with a scooping motion and surrounds or "corrals" it. Even at this age he often uses both hands, and he may still clumsily push the object out of reach. If he succeeds in getting hold of the cube, he will carry it to his mouth, inspect it briefly, and perhaps release and procure it again.

At first the child's reaching consists of crude shoulder and elbow

[2] A discrepancy between fear of what might happen and the actual occurrence of accidents, injuries, and illnesses is common among parents (Jersild, Woodyard, and del Solar, 1949).

movements, illustrating the proximodistal direction of development noted in an earlier chapter. His aim is poor and his approach clumsy. In time, he becomes able to make selective movements with his wrist, to aim more accurately, and to rotate his hands. In his first attempts at grasping, he makes practically no use of his thumb, but closes in upon the object with a mass movement of the palm and fingers. This, in time, yields to a deft and well-aimed

TABLE V

ADVANCES IN PREHENSION[3]

Motor Performance	*Age Placement in Months*
Retains red ring (retains a ring, designed for the test, when placed in his hand)	0.7
Arm thrusts in play (when lying in a dorsal position, makes vertical arm thrusts in random play)	1.7
Hands predominantly open (hands predominantly open even though not grasping an object)	3.6
Beginning thumb opposition (beginning evidence of use of thumb in opposed manner in grasping a cube)	4.1
Partial thumb opposition (opposes thumb to fingers in a partial, but not complete, manner, using the palm of the hand, as well as thumb and fingers in picking up the cube)	5.1
Unilateral reaching (tends to reach and manipulate with one hand more often than bimanually)	6.4
Rotates wrist (rotates wrist in manipulating toys)	6.7
Complete thumb opposition (picks up the cube with thumb and fingers completely opposed, and without the use of the palm)	7.6
Partial finger prehension (picks up a small pellet with several fingers opposed to thumb and not with a scooping into the palm with the fingers)	7.8
Fine prehension with pellet (picks up a small pellet precisely with thumb and forefinger)	9.3

grasping with the thumb and the tip of the forefinger. Up to the age of about twenty-four weeks, the infant's approach seems to consist of three distinct acts, including the raising of the hand, a circuitous and forward thrust of the hand, and then a lowering of the hand. Finally, at about forty weeks, the act is coordinated into a single performance, with little remaining trace of separate acts.

These observations illustrate only a few of the steps involved in

[3] Adapted from N. Bayley, *The Development of Motor Abilities During the First Three Years*, Monographs of the Society for Research in Child Development (1935), No. 1, 26 pp. Reproduced by permission.

the development of the seemingly simple act of reaching, grasping, and handling an object. The age at which children achieve the performances described above will vary, of course, with different individuals.

The summary in Table V gives the median age at which various performances with arms, wrists, and fingers were achieved by infants who were the subjects in a study by Bayley (1935). The items that are listed have been selected from a larger list of motor items, some of which are reproduced elsewhere in this chapter. It will be noted, among other things, that Bayley distinguishes between "beginning," "partial," and "complete" thumb opposition; and that separate ages are given for prehension involving thumb opposition in the grasping of a cube, as distinguished from "partial" and "fine" prehension in picking up a small pellet.

Developmental changes in interest and attitude with reference to a motor performance. All aspects of motor development during early childhood illustrate the principle, set forth in Chapter Two, that a child seeks spontaneously to make use of his growing power.[4] This tendency may, however, show itself in different ways and with varying intensity at different stages in the development of ability. An illustration of this fact appears in a study of the responses of a child to an opportunity to climb an inclined board (Damann, 1941). The first observations were made at eight months when the youngster had just begun to creep. At this time the opportunity to climb was not, in itself, a strong attraction, apparently, for the child was lured on by means of a toy. But the child's attention span was short and he was easily distracted, so he would pause to examine a knot in the wood, a speck of dust, or a scratch in the varnish. At a later phase the toy used as a lure sometimes overstimulated him, for in his eagerness to secure the toy he would slip back when he raised his head and shoulders to see the prize, and this shifted his center of gravity and threw him off balance. At a later phase the performance of climbing the board became satisfying in itself. At

[4] Studies dealing with motor activities that are reviewed in Chapter Two in the discussion of the role of learning and growth in development are not reintroduced in the present chapter.

this time the youngster frequently went up and down the slide several times even though there was no lure. At a still later phase the motor task of climbing the inclined board had been mastered, and seemed no longer to offer a challenge in itself. Now, again, the child was distracted, not because he was overstimulated by the lure, but because he was bored. In order to make things more interesting, he would try variations in his usual methods of climbing.

Later Features of Motor Development

After the child has reached the ability to walk alone, his motor progress and the specific skills he acquires depend to a larger degree upon special opportunities than was true at an earlier time. This does not mean that each child's progress becomes a law unto itself.

TABLE VI

Advances in Locomotion[5]

Motor Performance	*Age Placement in Months*
Walks sideways	16.5
Walks backward	16.9
Stands on one foot with help	19.9
Walks upstairs with help	20.3
Walks downstairs with help	20.5
Walks upstairs alone, marks time	24.3
Walks downstairs alone, marks time	24.5
Jumps off floor; both feet	28.0
Stands on left foot alone	29.2
Stands on right foot alone	29.3
Walks on tiptoe	30.1
Stands on walking board with both feet	31.0
Walks on line; general direction	31.3
Jumps from chair	32.1
Walks upstairs, alternating forward foot	35.5
Walks tiptoe three meters	36.2
Jumps from height of 30 cm.	37.1
Distance jump—36 to 60 cm.	39.7
Jumps over rope less than 20 cm. high	41.5
Distance jump—60 to 85 cm.	48.4
Hops on right foot less than 2 meters	49.3
Walks downstairs—alternating forward foot	50.0

[5] Adapted from N. Bayley, *The Development of Motor Abilities During the First Three Years*, Society for Research in Child Development Monographs (1935), No. 1, 26 pp. Reproduced by permission.

TABLE VII

MEASUREMENTS OF SELECTED MOTOR ACHIEVEMENTS DURING PRESCHOOL YEARS[6]

Activity	*Motor Age in Months*		
	Both feet	One foot	
Hopping:			
1 to 3 steps	38	43	
4 to 6 steps	40	46	
7 to 9 steps	41	55	
10 or more steps	42	60	
Skipping:			
Shuffle		38	
Skip on one foot		43	
Alternate feet		60	
	Straight	Circular	
	(10 feet)	(4½ feet diameter)	
Walking on One-Inch Path; No Steps off	37	45	
	3-step stair	11-step stair	
Ascending Steps:			
Mark time, without support	27	29	
Alternate feet, with support	29	31	
Alternate feet, without support	31	41	
	3-step stair	11-step stair	
Descending Steps:			
Mark time, without support	28	34	
Alternate feet, with support	48	48	
Alternate feet, without support	49	55	
	12 inches	18 inches	28 inches
Jumping:			
With help		27	36
Alone, with one foot ahead	27	31	43
Alone, feet together	34	37	46

Children reared in similar environments exhibit, within broad limits, a good deal of uniformity in the manner in which they progress from one level of performance to the next and add new skills to

[6] Adapted from B. L. Wellman, "Motor Achievements of Preschool Children," *Childhood Education* (1937), 13:311-316. Reproduced by permission. "Motor Age" represents the age at which 50 per cent of the children showed the accomplishment that is indicated.

their repertory. Moreover, in some studies it has been observed that children whose opportunity to acquire a certain skill has been delayed will tend to pass through stages similar to those exhibited by children who had opportunities for practice at an earlier age. However, the older child, when he does get an opportunity, is likely to pass through the preliminary stages more rapidly.

Walking, running, jumping. Tables VI and VII present summaries that indicate children's progress in certain motor skills after the age of learning to walk. The first summary, which is adapted from Bayley's study, shows the rate of advance in certain aspects of locomotion. A number of motor performances are represented in Table VII, which is based upon studies by Wellman (1937), McCaskill (1936), and McCann (1936).

Use of wheel toys. An account by Jones (1939) of the development of children's uses of a number of wheel toys (doll carriage, wagon, dump truck, kiddie car, and tricycle) offers many insights into changing motor reactions as children become older. The study involved observation of twenty-four children from the age of twenty-one to forty-eight months. The following account illustrates a change in the uses made of vehicles, and shifts in interests as the child's ability increases.

At ten months, David crept to a small doll carriage which was in the room. He looked inside it, then held on to the side as he raised himself a little, and ran his finger along the rough surface. He started to creep away, but turned and gave the carriage a small push. His interest span was thirty-five seconds.

At twelve months, Barbara, who could walk only a few steps alone, saw her older brother, aged thirty months, climb into a large doll carriage. She rose to her feet and pushed the carriage with her brother in it across the floor. At other times she was unable to push it because it slipped away from her. (This item illustrates the fact that small children will often, at first, try to make use of a carriage as a support in walking; a relatively heavy, sturdy carriage, which has a low center of gravity and which does not move at a light touch, is more congenial to the child's purposes at this age than is a flimsy or easily pushed vehicle.)

At later ages, as would be expected, the children became more adept at using the doll carriage for pulling and pushing on the

level floor or up an incline or under an arch. At twenty-one months, 15 per cent of the children used the carriage as a conveyance for other materials; at thirty-six months, 55 per cent of them did this. In time, the doll carriage was less interesting than certain other wheel toys, except as a conveyance.

The following statements offer further descriptive accounts of the use made of the wagon by the same child at successive age levels; the records are much abridged:

Twenty-one months: Starts to climb in; walks away; returns and looks at wagon; pushes it forward from behind; leaves; examines other material in the room; manipulates a light fixture on the wagon; pushes wagon back and forth; plays with other material in the room, and so on. (During ten minutes, he has gone to the wagon and left it again three times.)

Twenty-four months: Gets into wagon with right knee in and left foot on floor; leans over and examines light; sits and shakes handle (note that there is no propelling, although he is in a position to propel); touches trademark on side; he examines wheels, touches various parts, and so forth; gets out, examines parts; pulls wagon to the incline and makes one attempt to pull it up, lays the handle down and says: "I want to go home and see Charlie" (this after five minutes spent entirely in or with wagon); observer suggests that he use the wagon; he makes a few passes at wagon, pulls it briefly, then wanders about.

Thirty months: Gets into wagon with right knee, with left foot on floor, and propels the wagon, first forward and then backward; gets out and asks for doll carriage (apparently desires to combine other materials with wagon, for when asked to continue to use wagon, he gets a small wagon and puts it into the larger one); pushes and pulls; sits astride and tries to propel with both feet, but cannot reach the floor, then propels with one leg as before; continue pushing, pulling, and the like.

Thirty-six months: Propelling with one foot now established: a new performance is to pull wagon empty to the top of an incline and coast down; the child also hauls dirt with the wagon.

Forty-eight months: Pulling, pushing, propelling, coasting, and use of wagon to haul things continues, with two notable additions: (1) uses in make-believe game ("I'm playing moving van"); and (2) stands up in wagon, steering it by means of the handle, as his sister pushes him on request, saying, "Look everybody, I'm standin' up riding," and later telling another boy: "Did you ever stand . . . ? It's lots of fun. . . . Can you hold your balance?"

In this study it was noted that unskilled repetition of activities, manipulative in nature, was characteristic of the children from approximately twenty-one to twenty-four months. From twenty-four to twenty-six months, abilities involving muscular control increased, followed by the practice of skills from twenty-six to thirty-six months.

When a child had mastered an activity so well that it did not require his full attention he often proceeded to merge it with another performance. In other words, the progress was from work with a separate movement toward a combination of several movements

TABLE VIII

MEDIAN REACTION TIME BY AGE AND SEX IN SIGMA UNITS (0.001 SECOND), AS MEASURED BY THE MILES REACTION-TIME BOARD[7]

Age in Years	*Boys*	*Girls*
3½	492	518
4½	356	424
5½	311	356
6½	259	286
7½	260	250
8½	223	249
9½	218	202
10½	229[a]	229[a]
11½	192[a]	192[a]
College students	171	172

[a] Scores for boys and girls combined.

into one activity. But later, at about forty-eight months the children centered their attention mainly on predominating ideas which they were attempting to put into practice. As a result, the performance of any one skilled movement was usually secondary to the project as a whole.

Increase in speed and strength. As the child advances in age, there is an increase in expertness and versatility in his skills, and there is a change also in the underlying strength and speed of his movements. An indication of increases with age in speed of motor response appears in Table VIII. This table shows median scores

[7] Adapted from F. L. Goodenough, "The Development of the Reactive Process from Early Childhood to Maturity," *Journal of Experimental Psychology* (1935), 18:431-450. Reproduced by permission.

obtained by individuals at various age levels in a test of the speed with which the individual can execute a voluntary motor response on hearing a sound.

Further indications of changes in speed, accuracy, and power in certain athletic performances is shown in Table IX. This table is based upon findings obtained by Jenkins (1930) in measurements of fifty boys and fifty girls at each level from five to seven years. The

TABLE IX

AVERAGE SCORES OBTAINED BY FIVE-, SIX-, AND SEVEN-YEAR-OLD CHILDREN IN VARIOUS MOTOR PERFORMANCES[8]

Activity and Measure Used in Scoring	*Age Groups*					
	5 Years		*6 Years*		*7 Years*	
	Boys	*Girls*	*Boys*	*Girls*	*Boys*	*Girls*
35-yard dash—timed in seconds	9.30	9.70	8.52	8.84	7.92	8.02
Hop 50 feet without error—timed in seconds	10.82	10.33	9.20	8.89	8.81	7.59
Baseball throw at target—10-foot distance—error in inches	8.87	16.90	5.40	13.17	4.20	8.50
Baseball throw—distance in feet	23.60	14.50	32.80	17.80	41.40	24.40
Soccer kick—distance in feet	11.50	8.00	18.40	10.10	25.40	15.00
Standing broad jump—distance in inches	33.70	31.60	39.30	38.00	42.20	41.00
Running broad jump—distance in inches	34.40	28.60	45.20	40.00	58.80	50.80
Jump and reach—vertical distance in inches	2.52	2.22	4.02	3.48	4.98	4.28

original study should be consulted for information concerning the children who were tested and concerning the spread of scores at each age level. A study by Baldwin (1921) of strength of grip, as measured by a dynamometer which a child squeezes in his hand, portrays increases that come from seven years onward. Seventeen-year-old boys had more than three times as strong a grip as seven-year-olds, and in girls the strength of grip more than doubled during

[8] Adapted from L. M. Jenkins, *A Comparative Study of Motor Achievements of Children at Five, Six, and Seven Years of Age*, Contributions to Education (New York: Teachers College, Columbia University, 1930), No. 414, 54 pp.

this period. Differences between the sexes in strength of grip was evident at all ages.

Integration of skills into complex activities. As motor skills become established, they tend more and more to be incorporated into larger projects and enterprises. In her study of the development of children's uses of wheel toys, Jones found that children would concentrate all their attention on a certain motor performance as a project sufficient in itself while they were still in the process of mastering the performance (Jones, 1939). But once the children had mastered the basic operations (such as riding the tricycle, propelling the Kiddie Kar with good control of direction), she found that they tended to spend less time on the activity as an occupation in itself and merged it with a more extensive enterprise, such as a make-believe game of transportation.

The fact that a child has become skillful in a performance does not mean, however, that the performance no longer has any appeal in its own right, for the child may go on to perfect and enlarge his skill, to add hazards and "embroideries" to his performance, as when he takes his tricycle over the bumps or rides it along ledges or down steep grades, or when he goes down the slide backward, or endeavors to make a one-hand or running catch after he has become adept at catching a ball with both hands while standing still. Some skills that can be used satisfactorily even by a small child still afford almost limitless opportunity for further refinement and improvement as he grows older. Examples are such activities as playing marbles, roller skating, swimming, bicycling, and ball play of various sorts. Ball play is a good illustration of an activity which offers so wide a range of possibilities that it is challenging to a clumsy beginner and to a major leaguer.

However, when a child spends time in devising new stunts and hazards in his use of a given skill, it is not always because he is deeply interested in this activity. He may be lacking in opportunity to try his hand at something else. In a study of nursery-school and kindergarten children, Gutteridge (1939) found that by the age of three or four years many children have mastered a number of the elementary activities afforded by the conventional equipment in a

nursery school or kindergarten, and they continue to repeat the old performances or try to make elaborations upon old skills for lack of anything else to do.

Motor and Artistic Activities

One area, among many others, in which motor operations play an important role is in the field of the arts. Such activities as drawing and constructing models or designs with clay or blocks, aesthetic dancing, and the playing of musical instruments require manual skill as well as the ability to conceive and plan. In studies of these activities, it has been observed that children progress through certain more or less regular stages or steps. If a child of three, for example, is given as much opportunity within one year to work with clay or blocks as most children have received by the age of six, he does not proceed to perform like a six-year-old. And if a six-year-old child is introduced for the first time to such materials, he is likely to begin to perform like a younger child, not like a typically experienced six-year-old, but he probably will move fairly quickly up to a higher level of performance. This observation suggests that it may be best for a rank beginner to begin at the beginning—even if it means performing at the start at the level of a young child—and this rule has implications for the training of children at home and at school. Probably one of the main reasons why some adults are so at a loss in drawing and other graphic arts and in instrumental music is that they were compelled at school by their teachers or the course of study to begin at a level that was beyond them. If they could be allowed to struggle through the earlier childish phases they might not become so discouraged.

An interesting account of children's progress in block-building is offered by Johnson and her associates (1933). They observed that a child at first simply handles and carries the blocks and piles them into irregular masses. This is followed by the beginning stages of construction, between two and three years, including such simple designs as are achieved by placing the blocks in a row, one on top of the other, to form a tower, and experimentation with a plan,

such as spacing alternating sizes, or attempts to make a structure, such as a bridge or an enclosure. These activities are followed by further development of attempts to devise patterns and by improvement of technique in handling the blocks. By the ages of four and five years, the children are described as using the blocks for dramatic representation; and at five or six years, attempts are made to reproduce actual structures. Individual children vary considerably with

TABLE X

BLOCK-BUILDING ACTIVITIES[9]

Levels of Performance in Block-Building	*Number of Children Showing the Various Levels of Performance*						
	2 years	*2½ years*	*3 years*	*3½ years*	*4 years*	*4½ years*	*Total*
Crude, unsteady towers (which toppled over on their own accord or were "joyously demolished by their maker"	3	9	4				16
Towers, carefully done (primitive, but blocks fitted so they would stand with some apparent joy in workmanship)	1	5	7	9	3		25
Some imaginative elaboration (a definite plan, such as a train or house, somewhat recognizable)		1	6	1	4	2	14
Careful, symmetrical construction (houses with windows, trains on tracks, etc.)		2	2	1	2	2	9

respect to timing and sequence. It was noted, however, that children who had had no previous experience with blocks at the age of four or five years tended to repeat the stages exhibited by children who began their block play at the age of two, but the older children passed through the various stages at a more rapid rate.

Table X, based upon results obtained by Slater (1939) in observations of nursery-school children's spontaneous uses of blocks for

[9] Adapted from E. Slater, II. *Types, Levels, and Irregularities of Response to a Nursery School Situation of Forty Children Observed with Special Reference to the Home Environment.* Studies from the Center for Research in Child Health and Development, School of Public Health, Harvard University, Monographs of the Society for Research in Child Development (1939), 4, 2, 148 pp. Reproduced by permission.

building purposes, shows the frequency of various structures at different age levels. The children's handiwork was graded according to a four-point scale, as indicated in the summary.

In children's attempts to draw, likewise, a general pattern of progress has been noted. According to observations made by Biber (1934), the child passes through a stage of exploration, followed first by acquisition of some manual control, then by efforts to make designs, and finally by the beginnings of representative drawing at about the age of three and a half and four years. In their first attempts to draw, many children make vertical lines before they are able to make horizontal lines; they also find it easier to imitate a drawing made by another as they watch than to imitate a finished copy.

Interrelations in Motor Development

From early childhood into adult years, motor achievement stands for a combination of many factors. Among the more obvious determining factors are strength and speed, size, and anatomical build. Among the more elusive factors that influence motor performance are interest, self-confidence, a tendency to be intrepid or fearful, willingness to take a chance, self-consciousness and its opposite, and so forth.

A child may be quite unskilled at one performance and still do well in others. In studies that have been made, it appears that there is relatively little correlation between ability in various specific motor performances (Gates and Scott, 1931; Wellman, 1937). Low correlations,[10] usually ranging below 0.30, have been found between scores in separate activities, such as throwing, climbing, and jumping. Whereas correlations between various tests of strength tend to be considerably higher (ranging from 0.40 above 0.80), there may be relatively little relationship between strength and speed. In commenting on this fact, Wellman, in a study cited previously, states that, by virtue of this lack of interrelation, one

[10] For a brief account of what is meant by a correlation and an illustrative computation, see Chapter Eighteen.

should be hesitant in speaking about "the motor ability" of the child. Rather, it is safer to talk about "motor abilities" as a series of skills that are not closely related. Further study would be necessary to determine the extent to which this lack of interrelation is due to chance factors in the environment and to determine to what extent general factors of ability might be found.

A problem that also needs further study in this connection is the extent to which competence in one skill may help a child to undertake another skill with more confidence, even though, for the time being, he may stand high in one and be quite low in the other.

The fact that motor abilities tend to be rather specific, so that a child who excels in one performance will not necessarily excel in others, and a child who is poor in one performance need not be poor in others, implies that opportunities for motor learning should be as varied as is practical, in order that all children may have a chance to develop their aptitudes.

Relation of Physical and Mental Ability

The general finding has also been that there is a low positive correlation between the mental and physical status of children. In a study dealing with the relationship between mental growth and physical growth, Abernethy (1936) investigated a large number of children and college men and women. The physical data included measures of standing and sitting height, weight, carpal development, chest girth, lung capacity, and records of pubescence. The data with regard to mental development were obtained from systematic mental tests. Abernethy found, as have other investigators, that there was a positive correlation between mental and physical status, but that this correlation was relatively low. Jones (1949) found that there was practically a zero relationship between intelligence and motor performance in a group of adolescents.

In a study of young children, Bayley (1933a) found that during the first fifteen months there was a relatively high degree of relationship (a correlation of 0.50) between "motor" and "mental" abilities, as far as these could be differentiated and separately meas-

ured. Success in one sphere seemed to be associated with success in the other. However, after the age of fifteen months the correlations were low although positive. This suggests that possibly the operations labeled as mental and motor during early infancy were not well differentiated. Shirley found a correlation of 0.28 between precocity in walking and intelligence (as measured at eighteen months). In studies of older children and adults, relatively low relationships have been found between intellectual ability and motor ability or physique (Paterson, 1930; Jones, 1949). In cases of extreme mental deficiency, however, children are likely to be also below normal in their physical and motor development.

The child who has a hard time in an intellectual task, such as arithmetic, may be able to do very well in several athletic activities or in practical arts and crafts. The more the school program calls for only one kind of ability the more likely it is that there will be children whose main experience in school is failure or humiliation or boredom. The more the program calls for, and honors, the varied abilities of children the more children there will be who have a chance to achieve something that counts. The personal satisfaction that can be derived from being able to do something well is an important factor in a child's growing conception of himself. In other words, motor development deserves important consideration from the point of view of good mental health. In the opinion of the writer, the people in the school and in the community at large who determine how schools are to be equipped and what the curriculum shall be have tended grievously to underrate the importance of motor development.

The importance of opportunities for motor learning is further emphasized by findings in a study (Nestrick, 1939) which indicate that the motor activities undertaken by adults are influenced to a large degree by what the adult learned or failed to learn as a child. It apparently is rather seldom that a person chooses to take up an entirely new motor skill after he has reached the adult level. It does not follow, of course, that each motor skill that a person learns as a child will be of value to him at the adult level. It is enough if a skill has some value when he is young. But even though all that is

learned during childhood may not necessarily stand in good stead during adult years, it still is apparent that the provision of opportunities for motor learning in childhood not only may contribute in important ways to the child's welfare at the time but also may be an investment that yields fine dividends in the future. In passing it may be noted that of the skills that had been carried on into adult years in the study most had been acquired outside of school hours.

Motor Performance and Socioeconomic Status

Another important fact regarding the place of motor development in the scheme of things is that ability in the common athletic skills (and probably also in common mechanical skills) is not tied to socioeconomic status or what some authors refer to as "social class." In studies of children of adolescent and near-adolescent age, Jones (1949) found that there was little or no correlation between children's performance in various physical feats and their socioeconomic status. This is different from what is usually found in measurements of intelligence and scholastic achievements, for in these measurements children of higher socioeconomic status tend to have an advantage.

So here is an additional facet of the role of motor ability in the larger affairs of life: They provide, to a degree, a democratizing influence. The child from the wrong side of the tracks, who might be discriminated against when appraised in terms of IQ (intelligence quotient) or academic grades, may be able to make the grade in matters that also are important in the eyes of others if given a chance to develop his motor potentialities. It does not follow, of course, that the poorer child will be the better performer in sports—that is not the nature of the relationship. But it does follow that children who do not "rate" on the basis of IQ or school grades or family background have about as good a chance as their brighter and more affluent playmates in possessing athletic competence of the sort that is regarded as an important personal asset by their peers. This finding emphasizes, as do others mentioned above, the importance of viewing the child's motor abilities in the light of the total perspec-

tive of his development and in the light of the assets and limitations he brings with him into his relationships with his peers.

Motor Performance as a Personality Manifestation

The interplay of personality factors in motor activity, as distinguished from motor ability as such, has not been probed very much but it represents an important subject. The fact that one person pursues a rather vigorous or aggressive interest while another selects less vigorous physical activities may be tied to other features in their personalities (Fauquier, 1940).

In everyday life it can be observed that a child's motor activity often seems to be congruent with other features of his make-up. While the factors of maturation and opportunities to practice are important, as we have seen, something more is involved, for children of the same maturity level and with equal opportunities for practice differ very widely. From an early age, the differences children reveal in their choice of motor activities and in their skill may also appear in other ways. One child has more of a tendency than another to be enterprising and intrepid and to take the plunge now into this, now into that, activity. One child's reach is scaled to his grasp, while another's is not. One child from an early age persists in a motor activity in spite of difficulty and failure while another gives up quickly. One child braces himself to catch a hard baseball, tears into an opposing player, and risks a rough tackle in football, while another shrinks from being hurt, yet has his own favorite list of less rugged sports. One child has no hesitation in trying his hand at a competitive sport, even if he is not good at it; it does not seem to bother him that he is inept and that he probably cuts a poor figure in the eyes of the spectators. Another has a higher standard for himself, is less able to let himself go or to run the risk of looking foolish, and, if he does enter in, and misses an easy catch or a clear shot, he blames himself bitterly and says he feels like kicking himself.

When one youngster thus shrinks from a sport or game or test of skill because of the possibility of making a poor showing and being ridiculed, while another is not inhibited in this way but carries on

even if others do make fun of him, they are revealing traits that go beyond the sphere of motor development. Something more pervasive is involved, something which is tied to the child's attitude toward himself and others, and the expectations he places on himself. If he shrinks from making a poor showing in competition with others, it may mean that he has a very poor assurance of his own worth: Unless he can prove himself by doing well, he sees himself as one who is no good in his own eyes or in the eyes of others. Again, if he shrinks from the possibility that he will be ridiculed the reason may be that he is already very defensive in his attitude toward others, expecting the worst from them. A person with a low evaluation of himself may, of course, go to the opposite extreme and not only run the chance of making mistakes but do so brazenly, with a grin on his face, as though he were a clown who is able to laugh at his own blundering self. But if we could see beneath his grinning and his ungainliness we might find that he is quite unhappy.

The youngster who will join in a game even if he is not good at it may, in turn, be the one who has the courage to face ridicule from others and does not hold himself to so high a standard that he cannot allow himself to make mistakes. He may also be one who gets the kinds of satisfactions that are most important to him from other kinds of achievement (such as academic work), so he feels he can afford to do poorly on the playing field. There are many other possibilities that might be mentioned. But the main point is that the young person's performance in physical skills takes on a deeper significance when viewed in the light of how his performance is related to attitudes and ideas pertaining to himself and the role he must play in his own eyes and in the eyes of others.

Here is one area of activity, among many, in which the two approaches to the understanding of children, mentioned in an earlier chapter, must be taken into account. The objective appearance of things, and the subjective state of affairs as viewed from the standpoint of the child, may be quite in harmony or they may be as different as anything could be.

Objectively, the child who is the best hitter, the best skater, and the best ball carrier is a great success. But if his success in handling

a ball is something he desperately needs to bolster his own self-regard, then, with his self-esteem hanging by so fragile a thread, his laurels probably do not make him happy. He is skating on thin ice.

Again, if he is clumsy and hesitant and self-conscious, and then improves in this respect, so that he gains in confidence, learns to take his good plays and his misplays in stride, then, even if he is far from being one of the best performers according to objective measurements, we may regard him as a successful performer—one who is dealing with a subjective problem in a very constructive way.

These are only two illustrations of the way in which the inner dimensions of success and failure may be quite different from the objective achievement. Unfortunately, so much of the attention in physical education at school, and in the highly publicized sports activities the child meets in the news, and even in the physical activities parents undertake with children at home, is centered on external criteria of success that much of the psychological significance is overlooked.

Handedness

Handedness provides a good example of the way in which a given form of behavior may represent an interplay of many factors, including conditions within the organism, circumstances in the environment, and factors that come into play in a child's relationships with others and in his attitudes concerning himself. For this reason, we are giving more space to the subject of handedness than it might deserve simply from a statistical point of view.

In early infancy, hand preference is not as clear or as fixed as it will be after the age of about two or three, but when a child reaches school age as a left-hander he is a deviate in the sense that he differs from most other people. If the culture in which he lives severely frowns on left-handedness, he will probably be regarded not only as a deviate but as a freak someone should do something about. If the culture is more tolerant about left-handedness (as it is now quite generally in the United States), the left-handed person will not suffer

in the opinion of others (at least not directly), and he himself may be completely nonchalant about his handedness—at least on the surface. The hardship a child must bear because of being left-handed may be very light, yet there is bound to be at least some hardship connected with being a left-hander. A person cannot differ from most other people without having to pay at least a small price for such a difference.

There are three considerations that are important in understanding handedness as it affects the individual child. First, how did he get that way? Did he become left-handed because his own natural bent toward left-handedness was so strong that it won out against the pressures of a right-handed world? If so, it is a good thing for him that he is left-handed. There probably are many such "naturals" among left-handers.

On the other hand, was the preference more a matter of chance so that he came to favor his left hand not because his own inclination was strong but because no one paid much attention to him or noticed particularly which hand he used, or cared very much about it? If so, his hand preference might be regarded as a sign that his parents neglected him, at least in that respect, in early childhood. But we cannot assume that there has been neglect unless there is evidence other than left-handedness to show it.

Second, what practical handicaps, if any, does the child's left-handedness impose on him? There are bound to be some penalties, even if miraculously he avoids busybodies who might point him out. There are performances which are hard for a right-handed person to demonstrate to a left-handed child—throwing, drawing, pouring from a kettle with a lip on only one side, handling the old-fashioned types of telephones, knitting, tying a tie, tying a bow, managing a musical instrument, and the like. Even in the handling of such implements as axes, knives, hoes, spades, knife and fork, it is slightly awkward for a right-handed person to set an example for a left-handed child. In addition, the left-handed child at school may learn to write in a crab-like fashion, holding his hand in such a position that it smudges what he already has written, and this often means that his

work has an untidy look. Again, he may be handicapped in that he cannot, for example, share the baseball glove other boys use (at least it is awkward to do so).

Besides, there may be a subtle psychological effect that operates when an adult and a child have different hand preferences: One may become discouraged because the model set by the other must, in a sense, be adapted in reverse.

Third, there is the question as to how the left-handed person himself feels about the idea of his handedness quite apart from any important practical handicaps that might go with it. Does his handedness make him feel different from others? It is bound to if others smirkingly call attention to it, and there usually are people who will do that. He might also feel a bit ashamed so that he must make a special effort not to be conspicuous. This may happen, for example, when he is self-conscious at table when there is company, trying to avoid a collision between his left elbow and the right elbow of the hearty feeder next to him.

These details are small in themselves and may not mean much, but anything that hinders communication between the child and others will, at least to a small degree, curtail his spontaneity and freedom. However, the effect of handedness *as such* is likely to have a very small impact on the child's personality and his view of himself if other circumstances in his life and in his relationships with others are favorable. Also, the difficulties faced by a child who might have turned out to be a right-hander but turns out to be a left-hander are likely to be minor compared with the plight of the child who has a strong natural bent toward left-handedness, or who gets a long start in learning to prefer the left hand, and then is compelled to shift to the right hand. The interference and thwarting which such a shift involves may have many unfavorable aftereffects.

Theories of handedness. In the theories set forth to account for handedness it has been variously assumed that handedness is inherited; that it is due to anatomical differences between the two sides of the body; that it is due to the fact that one hemisphere of the brain is dominant; that it is due to dominance of one eye over the other; that it arises through chance; that it is due to direct or indirect

training imposed by others who have grown up in a traditionally right-handed world.[11]

Varying degrees of handedness. Although a majority of children eventually become predominantly right-handed, it is not usually until several months after birth that a definite hand preference is established. Even when apparently well established, hand preference may be less clear-cut than appears at first glance. A person may use the right hand in writing, throwing, and eating with knife and fork and yet, on further examination, it may be found that he uses a left-handed approach to some performances, like digging with a spade, and that there may be many additional acts which he can perform equally well with both hands. Again, a person may do better with one hand when fine movements are involved and do about equally well with both hands in a grosser form of the same movements, as when a person writes better with his right hand on paper but does almost as well with his left as with his right in writing on the blackboard. However, most persons do exhibit so distinct a preference for one hand or the other in the ordinary acts of everyday life that, for practical purposes, we may call them right- or left-handed.

The degree to which the right hand is preferred in certain acts of common use is indicated in a study by Hicks (1931), who found that 96 per cent of a group of sixty children aged two to six years used the right hand in throwing a ball at a moving target, and by Jenkins (1930), who found that from 85 to 90 per cent of 300 children aged five to seven years used their right hands exclusively in tossing a beanbag, throwing a baseball, and in reaching while jumping.

Early manifestations. The age at which hand preference appears has variously been set at from four to seven months by different investigators. Children have sometimes been observed to show a slight preference for the left hand during early months and then to shift to the right. Even when it seems that the baby definitely shows a preference for the right hand, he may continue to show a good deal of ambidexterity for several months.

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[11] For accounts of the development of hand preference, in addition to the studies mentioned below, see Ames (1949), Hildreth (1948), and a review by Martin (1952).

Differentiation of the use of the hands during the period from two weeks to eight months is shown in a study by Giesecke (1936) of seven infants who were observed from the time they were two weeks old until they were from four to eight months old (supplemental observations were also made of other children). Records were made of the infants' spontaneous use of their hands, and test situations were provided to precipitate hand movements. Interestingly enough, in four cases the differentiation favored the right hand and in three cases, the left. Even though the trend was toward preference for one hand over the other, this trend did not proceed regularly from the age of two weeks to the age of six months; rather, there were shifts in preference during this period.

Hand preference does not appear as an isolated event but is accompanied by lateral dominance of the same side of the body, according to Giesecke's study; she points out that there is evidence that lateral dominance concerns the body as a whole rather than merely the hands. In other words, handedness may be an aspect of "sidedness." Likewise, the head is more often turned toward the side of the preferred hand, and the eyes tend to turn toward the hand that is used; this suggests that eye dominance may be influenced by hand dominance (rather than the reverse), or, what is perhaps just as likely, that both the eye dominance and hand dominance may be aspects of general lateral dominance.

One of the prominent uses of the nondominant hand is for support while the other hand is active. Giesecke found that if no support was needed, the nonpreferred hand did not remain entirely motionless, but it was not actively used like the other. It can be seen from this that even though it might be a physiological factor that initially disposes the child to use one side more than the other, his "sidedness" will be further confirmed by habit as one hand repeatedly receives more practice than the other.

The number of left-dominant children found in Giesecke's study (six in a total of seventeen in the study as a whole) was relatively larger than one would expect from the proportions found among older children and adults. This suggests that there might be a rela-

tively larger percentage of southpaws in the population at large than now are found if the tradition of right-handedness were not so firmly established. The evidence in the study was not conclusive as to hereditary factors in handedness.

In studies by Johnson and his associates (1940a, 1940b) it was found that hand preference tends to be quite stable after the age of six years.

Other practical considerations. That children who have been compelled to change from the left to the right hand may show a tendency to stutter, at least for some time, has been observed in some cases, but the cause-and-effect relationship here is not entirely clear. It is difficult to determine whether the stuttering is directly due to the change in handedness or whether it is due primarily to the methods that are used and the atmosphere that prevails when the child is being forced into using his right hand. The stuttering, in other words, may be a symptom of the tension and confusion produced by the pressures that are brought to bear rather than a direct result of the change itself. Furthermore, while stuttering sometimes occurs, it by no means occurs in all cases in which a child is prevailed upon to change to the right hand; in addition, stuttering appears in cases in which there is no clear evidence of any difficulties with regard to hand preference. The important fact still remains that a change in hand preference as the result of pressure from others may, in individual cases, have unwholesome consequences. The risk of such consequences is certainly not worth while.

Considerably more frequent than efforts to change an established preference for the left hand are the efforts parents exert while hand preference is still in its formative stages. In a great many cases, youngsters seem spontaneously to develop a preference for the right hand, without parental intervention. But with many children parents take a good deal of pains to cultivate the right hand—as when they always make it a point to favor the child's right side in placing toys and tools within his reach; always place the spoon, cup, or pencil in his right hand; and gently transfer operations to the right hand if the child seems in a random way to have started with the left. There

are numerous little steps that parents can take to encourage the use of the right hand, and in most cases the child turns out to be the fine little right-hander that his parents intended him to be.

Because of the lay of the land in a right-handed world, the left-hander is bound to face many inconveniences. These inconveniences may be offset to some extent by the greater degree of ambidexterity some left-handers acquire. There is room for more systematic study in this area. Certainly handedness is important enough to deserve the attention of parents when the child is developing hand preference. But right-handedness is not so important in itself that parents should interfere if the child himself shows a strong inclination to lead with his left hand as he squares off for the battle of life.

CHAPTER SIX

Selfhood and Social Relationships

This chapter and the two that follow deal particularly with the child as an individual in a social setting. We shall consider first how the child's individuality is influenced by his relationships with other people. The two succeeding chapters will consider the development of the child's ability to play an increasingly active and responsible role in the society in which he lives.

From the time when his life begins, each child is very much a social being. From the time of birth, even while he himself is quite passive, strong ties are being established between him and other human beings. Interwoven with the child's earliest experiences and expectations, and intimately connected with his survival from day to day, are associations with other human beings and their activities. These ties accumulate as he emerges from the somnolence of the first few days of life, and they multiply during the ensuing weeks and months as he grows more alert to what is happening about him.

These ties, born of a child's complete dependence upon others, only dimly defined in his earliest experiences, and taken quite for granted at a later time, are powerful influences as long as he lives. It is through them that his awareness of his humanity emerges. His relationships with others are the soil in which his existence as a separate self has its roots.

As time passes, he becomes more independent and conscious of himself as a separate being, and as his powers increase, he becomes more self-assertive. His self-assertion may reach the point of apparent defiance of society and all its ways and works. But whatever front he may assume, he is never completely weaned from his dependence upon others; he never becomes so self-sufficient that he is immune to

the approval or disapproval of other human beings or free from a desire for affection and security in his relations with them.

The story of social development is also a story of the child's struggle to be an individual in his own right, to assert and express himself as an independent creature. In the normal course of events he becomes more actively "social" as he grows older, builds ties with other persons, and acquires values and aspirations that have a social orientation. But, along with this development he also learns to become more "individual," to assert himself, to be independent, and to have a voice in the management of his own affairs.

We sometimes speak of the "individual" and the "social" as though they represent two distinct and different spheres of existence. If we look to the growing child, however, we find that this is not the case. The run-about child is very individualistic but also very sociable. On the individualistic side we may note at various stages his readiness to protect his own interests and to rebuff invaders, and his personal ambitions. On the social side, we may note that he is bound to others with a tie that is as essential to his psychological existence as the umbilical cord was to his physical existence. Also on the social side, we may notice his early impulse to smile and laugh in the company of others, to solicit their company, to join when he is old enough to do so in common projects with others; his occasional displays of sympathy when he is small and of compassion when he is older; his evident desire for social approval, for belonging; his eventual loyalty to his group; his patriotism and readiness even to die for a common cause.

Self and Society

The child is a creature of the social life from which he draws his psychological nurture: Society lives through him. But he is not simply a creature but also in a sense a creator; from an early age he begins to assert a kind of independence. Although his selfhood is grounded in society he is not like a reed bending to every breeze or like a sponge that absorbs everything in the social currents flowing about him. Beginning early in life there is much selection involved in the process by which an individual comes into existence and emerges

as a separate self. That which we call the self comes into being as the child, with all his inborn capacities and tendencies and all that is inherent in his make-up, comes to grips with the experiences of life. To study the beginnings of the process of socialization we need to consider not only the social environment in which the child lives, and the social behavior he begins to manifest from an early age, but we also need to try to understand him as a growing self.

What Is the Self?

To answer this question we must look a little beyond the first signs of selfhood and see the self in the perspective of the life span.[1]

The self, as it finally evolves, is a composite of thoughts and feelings which constitute a person's awareness of his individual existence, his perception of what he has, his conception of who he is, and his feelings about his characteristics, qualities, and properties. A person's self is the "sum total of all that he can call his" (James, 1902).

The self includes, among other things, a *perceptual* component: The way a person perceives himself—the image he has of the appearance of his body; the picture he has of the impressions he makes on others. It also includes a *conceptual* component: The person's conception of his distinctive characteristics, his abilities, resources, assets, lacks, and limitations, and his conception of his background and origins, of his future, and of what he might become. There is also an *attitudinal* component of the self, including the feelings a person has about himself and his origins and background, his attitudes toward his present status and future prospects, his tendency to view himself with pride or shame, his convictions concerning his worthiness or unworthiness, and his attitudes (which may be mixed) of self-acceptance or self-rejection. As a person reaches maturity, these attitudes relating to self include also the beliefs, convictions, ideals, values, hopes, and commitments that comprise what we speak of as a person's philosophy of life.

The self may also be referred to as a person's total subjective en-

[1] The discussion here follows, in general, a treatment of this topic by the writer in an earlier publication (Jersild, 1952).

vironment. It is, for the person himself, like a distinctive "center of experience and significance" (Howie, 1945). The self constitutes a person's inner world as distinguished from the "outer world" consisting of all other people and things.

There are further ways of describing and defining the self which add to the total picture. The self may be described as the individual as known to the individual (Murphy, 1947); as the "custodian of awareness" (Sullivan, 1947); as "the nucleus on which, and in which and around which experiences are integrated into the uniqueness of the individual" (Wenkart, 1950). The self is a subjective phenomenon, but from the point of view of the person himself it is both subjective and objective: It can be regarded by the person both as a subject and as an object. When a person says, "This is how I feel," he expresses a subjective state which only he has any experience of. But he can also view himself objectively in the sense that he examines this feeling that he has, asks what is the nature of this feeling, and inquires what might be the reason he feels as he feels. So the self is a knower and something known, a perceiver and something perceived.

As mentioned at an earlier point, the concept of selfhood, constituting the private, intimate "inner" life of a person, which only he has access to and which only he can directly know, is an essential concept for understanding the growing child. This point is stressed here again, for in dealing with children and in studying them one needs constantly to be reminded of it. It is hard for a child or an adult, in viewing another person (as we seek in this book to view the growing child), to remember to ask what the situation might be like from the point of view of the person who is being observed. As the child matures, his selfhood is the sum and substance of his own existence as a human being. Unless we take account of the child's selfhood we deal only with the visible surface and the external operations which appear in the form of overt behavior. These are important because they are tangible features we must deal with and also because from them we can sometimes surmise what he thinks and feels. But to leave out such a surmise is like studying *Hamlet* and leaving Hamlet out.

The child's views and attitudes regarding himself are essential features of his existence whether or not they square with the views others have of him. His perception of himself is significant even if his perception is quite out of line with the picture others have of him when they look him over, as we say, from an objective point of view. His conception of his characteristics, his ability, and his prospects is a supremely important fact even though his conception may be quite unrealistic as judged by all standards other than his own. His attitudes concerning himself similarly represent a kind of essential truth even if by any kind of evaluation other than his own these attitudes are wrong: If he is convinced that he is disliked, unlovely, and bad, then within the dimensions of his own private world he *is* unlovely and bad even if the choirs of heaven and the hosts of the earth proclaim him to be a lovable saint.

Beginnings of Selfhood

The self is acquired. It is not ready-made. The development of the self involves, among other things, a process of differentiation. The child begins life as though he were part of his mother's body. For some time after birth he continues to be helpless and dependent. Very soon, however, he is active in trying out his capacities. He cries and people come. He turns and gets another view. In time, he explores the boundaries of his person and his environment. He tests the limits of his reach. He shows signs of being able to distinguish between people and things and between himself and others. He notices that things from the outside world can act upon him, that there is a difference between his experience and the particular happening that is making him feel as he does.

A feature of the developing self is increased awareness of personal properties and resources. The child gains in awareness of the parts of his body. He probably also at a fairly early age recognizes the press of inner wants and needs, as distinguished from conditions that can gratify or deny the gratification of such needs.[2]

Sooner or later he realizes that there are differences between his

[2] The development of self-awareness, as a feature of the growth of understanding, is discussed in Chapter Fourteen.

wishes and wants and the wishes and wants of others. He would like a certain toy, but his mother withholds it. He would like to be taken for a ride in the car, but his father leaves without him.

Social Origins of the Self

Each person's self is something individual, yet it has a social origin. Among those who have emphasized the social origins of the self is George H. Mead (1934): "The self . . . is essentially a social structure, and it arises in social experience . . . it is impossible to conceive of a self arising outside of social experience."

The bearing of social relationships on the development of the self has been emphasized especially in writings by Mead (1934), Horney (1937, 1939, 1945, 1950), Sullivan (1947), and their followers. The concept of "interpersonal relationships" is essential to a theory of personality development. This concept of interpersonal relationships is at the heart of anything that can be done at home or at school to promote healthy self-development, and it is an essential concept in connection with anything that might be done at home or at school or elsewhere to help a child to change unwholesome ideas or attitudes concerning himself.

According to Sullivan, the self is made up of "reflected appraisals." The earliest experiences which influence the development of the self are those with people. The child's earliest self-appraisal is in terms of what others think and feel about him. The origins of the self are in the hands of "significant" people, his mother or mother substitute, and others who are intimately connected with him. Sullivan believes that "personality can never be isolated from the complex of interpersonal relations in which the person lives and has his being." He further maintains, as we noted earlier, that the attitudes and feelings of significant people can be communicated to the child at first by a process of empathy, but, be that as it may, the child in time is able to perceive and consciously recognize what is taking place in his relationship with others. In due time, the child is able to understand language and what language communicates regarding the attitudes of others toward him. He comes up against restraints on his freedom

which as a young infant he had not clearly recognized as such. He perceives expressions of approval and disapproval and, according to Sullivan (1947), the self dynamism is built up out of experiences of approbation and disapproval, reward and punishment.

By approving and disapproving, helping or blocking, parents and other significant persons provide "the source of the material which is built into the self-dynamism." The experiences thus "marked" by the attitude taken by significant persons are the ones incorporated into the self.

When a child is accepted, approved, respected, and liked for what he is he will have an opportunity to acquire an attitude of self-acceptance and respect for himself; with such an attitude he will have freedom to venture. But if the appraisal placed on a child by others through the way they respond to him and treat him is mainly such as to repudiate him, blame him and find fault with him, belittle and condemn him (as in the case of a child whose parents do not want him, do not love him, have no interest in him as a person in his own right), then the growing child's attitudes toward himself will be mainly unfavorable. If the predominant attitudes of significant persons have been those of hostility, disapproval, and dissatisfaction he will tend to come to view himself and the world in similar terms. He will have difficulty in seeing or learning anything better. He eventually will acquire an attitude of disapproval toward others and toward himself, although he may not overtly express it.

There is thus a close relation between attitudes toward self and attitudes toward others,[3] according to Sullivan (1947); as one respects oneself so one can respect others. As one judges oneself, one judges others.

An important feature in the development of the self occurs when the child begins to recognize or to think he recognizes differences between his own wishes and the wishes of others who further or oppose his wishes. The exact age at which a child becomes able to attribute friendly intentions or hostile or forbidding intentions to other per-

[3] This position and the useful key it provides for understanding of self and others has been emphasized also by Kierkegaard (1949a, a translation of a volume published in 1848), Horney (*op. cit.*) and Rogers (1942b) and Sheerer (1948).

sons is hard to tell, but sooner or later this ability appears. He experiences the direct effects of being helped or hindered in connection with his own desires before he can recognize or form the idea that others are deliberately taking a stand for him or against him. In other words, he feels anger before he is able to take thought of whether someone is intentionally trying to thwart him. He probably experiences a great deal of satisfaction from comfortable relations with other persons before he is able to formulate the idea that other people like him. But when the child has achieved the ability to attribute purpose and intention to the acts of others, this ability will have profound and pervasive influence on his development. The ability to assign intention to others has a twofold meaning in the development of the self. This ability enables him to place an interpretation on what actually is happening to him when others treat him kindly or harshly. It also enables him to assign a meaning, as a kind of afterthought, to something that already has happened to him. If, for example, he feels offended because of something his mother does to him today, he may think back and see something offensive in what she has done before.

If a child is accepted he will have an incentive to be accepting of himself and accepting in his attitudes toward others. One mark of his self-acceptance is freedom to try himself out. One mark of an already existing attitude of acceptance of others is that the child tends to assume that they mean well, and he will be able to make allowances, for a time and within limits, if they don't. If a child is rejected and mistreated by others he will tend to respond to them in kind. One mark of having experienced severe rejection by others is that a child does not assume the best intentions but assumes the worst. He is suspicious (even when the intentions of another are friendly), and although he may not dare to strike back he will develop defenses and strategies for his own protection.

The machinery he sets in motion for defending himself may continue to operate in his relations with people for a long time, perhaps as long as he lives, even when he is with people who would gladly accept him.[4]

[4] In a later chapter we shall examine some of these defenses in greater detail.

The development of the child's ability to imagine may have an important bearing on the way he elaborates upon his views of himself and his relationship with others (Horney, 1950). If the child already is suspicious and defensive in his attitude toward others, he can through his imagination elaborate little criticisms into serious insults and signs of hatred. By the aid of his imagination he may be able to override his own weaknesses and limitations and thus avoid facing their reality. In his daydreams he can operate with a degree of power and omnipotence which completely belies his limitations. Through his imagination he may be able to absent himself for long periods of time from the real world and thus escape, or seemingly escape, from the people there who hurt him.

Maintenance of the Self

Along with the process of establishing a self, there is the effort to maintain it. As soon as the child has begun to form ideas and attitudes concerning himself he strives in the presence of others and in his own eyes to be himself (as he sees himself) and to live in accordance with his concepts or attitudes regarding himself, whether these be true or false. He tries to be consistent with himself (Lecky, 1945). He is likely to resist anything that is inconsistent with his own evaluation of himself. It may even be difficult for him to see or hear or grasp the meaning of anything that goes counter to his picture of himself.

Selfhood and the Process of Perception

As indicated above, when once a child has begun to formulate impressions, to establish ideas and attitudes, his perception of new events in his life will be colored by what he already knows, what he has learned to expect, and the preconceptions he already has established. So, in trying to understand a child, or in trying to communicate with a child, it is essential not only to consider what it is we set before his eyes for him to see, or what it is we say for him to hear, but also what is the viewpoint from which he will see, and what is the position he already has established that will influence what it is that he hears, if he listens. It is similar with the adult and what *he*

perceives: Everything he sees in a child will be influenced more or less by the impressions he already has formed, the preconceptions he has established, and the attitudes he brings to bear. There is a chance that the child will get a distorted view of what the adult does or intends to do, or seeks to communicate to him. There is a similar chance that the adult will have a distorted view of what the child is and does, and seeks to communicate. So unless an adult is willing and able to examine, and even possibly to challenge, or allow the child to challenge, his own ideas and attitudes, the distortion in his perception of the child may be very great. Unless he can examine these distortions, he will have trouble in communicating with a child. This thought repeats something implied in an earlier chapter: Effective social communication requires not only an effort to understand others but also an effort to understand one's self.

CHAPTER SEVEN

Development of Social Behavior (I)

The child's social life at first revolves around persons older than himself. The usual child is quite skillful in dealing with older persons before he actively plays a role with children of his own age. Even after he is able to run about in the company of his peers he continues frequently to come to the parent or the one who substitutes for the parent, seeking the kind of attention and assurance that an older person can provide.

From an early age, however, well before he is able to walk or talk, a child takes notice of other children, and by the age of two or three years, if he has a chance, he becomes more and more involved in the society of his peers. From an early age he begins to throw in his lot with his own generation. It is, of course, with this generation that he eventually will share the responsibilities of adult life. Before he reaches school age, and increasingly thereafter, a child's peers will influence his ideas concerning himself, his conception of the role he is to play, and his views as to what he should do and should not do if he is to be accepted by others as a worthy person.

Early Social Responses

Occasionally, an infant as young as two or three weeks will fix his eyes upon his mother's face and smile in response to her smile, but it is difficult to tell whether such apparent social communication is more than a chance happening. By the age of about three months, however, children show many signs of social awareness, such as ceasing their crying when a person comes, turning their gaze upon a person, giving heed to another's voice, whimpering or crying when a

person leaves their presence, making searching movements to locate an approaching adult, and smiling in response to another's gaze. Until the age of five months smiles in response to the gaze or the voice of another person are likely to appear, whether the voice is friendly or angry in tone or whether the gaze is accompanied by an angry or friendly expression. But at about five months and thereafter, infants begin to show more discrimination of tone and expression (Bühler, 1930). At about the fifth month, the infant likewise becomes more active in his advances toward others by way of vocalizations and attempts to grasp and to touch.

A further development, which appears during the first half-year of life, is the ability to distinguish one person from another. Signs that the child recognizes his mother can be noticed in some children at three months, and even earlier in some, but the ability to distinguish between persons whom he sees less frequently usually comes somewhat later. Usually by the end of the fifth month, and increasingly thereafter, this ability to discriminate becomes quite evident.

The development of this ability to discriminate may be accompanied by other forms of behavior which hitherto have not been shown, such as the first signs of timidity and shyness and the first signs of fear of strangers. In a study by Shirley (1933a), six of a group of twenty-five babies, whom the investigator had visited time and again from the first week of life, showed fear of the investigator for the first time during the latter part of the fourth month or at the age of five or six months. Similar instances of fear of people, appearing along with the development of ability to discriminate among different persons, have been noted in other studies of children's fears by the writer and Holmes (1935), illustrating the manner in which the mental, social, and emotional aspects of a child's development are interwoven with one another. Spitz (1950) describes flight reactions which some babies at about seven to ten months in age show at the approach of a stranger. The child's reaction may be to act coy, turning the head away, or he may hide his head in a blanket, cry, or scream.

Although timidity and fear of strangers provide interesting signs that the child is able to perceive differences between people, these

signs do not always appear. Babies differ to a marked degree in the way they accept or shrink from strangers after the first three to five months of life. At first glance it looks as though some babies are by nature rather shy while others are by nature outgoing and eager to welcome all comers. But there is also a strong likelihood that even at this early age the experiences babies have had with people will make a great difference. Parents differ very noticeably in the extent to which they shield their baby from contact with others or freely let others hold the baby, play with him, care for him, and act in a motherly and fatherly way with him. If a child has been closely guarded, as though his parents were jealous of him, or frightened at the thought of entrusting him to others and anxious about their own duties as parents, he will have less opportunity to get accustomed to having other faces close to his, other voices sounding near his ears, other arms holding him. On the other hand, a child who is shared to a much greater degree with relatives and guests will have the chance gradually and imperceptibly to get used to a variety of people (unless, of course, the parents "share" him because they are indifferent toward him or if, in the process, the visitors treat him in a painful and frightening way). Such a difference in early conditioning probably accounts (at least in part) for the fact that some babies are severely affected, as though suffering from intense depression and grief, when they are put in care of a stranger—as when the mother leaves them to be hospitalized—or when they are shifted from one foster home or foster institution to another, whereas others are not noticeably affected.

In this connection, two questions should receive attention: (1) Is it essential for a baby to have the experience of the constant, consistent mothering of one person? (2) Will he suffer if there is, to a degree, divided responsibility for his care, as would be the case if now one, now another member of a large household takes care of him, or if he is in the care of one person for a period of time and then is placed in the care of another? Some people have expressed quite positive opinions in this score.

The writer hazards three opinions which seem, to him, can be inferred from larger trends in the development of children and which

are based also (to a very limited degree) on first-hand observation. First, it is important for a child that there be a firm, consistent, and dependable basis in the relationship between him and those who care for him. Second, the nature of the care he receives and the qualities of tenderness and concern for him that it includes probably count more than the identity of the person who provides the care: A child can become accustomed to being content with any one of several good people who might act as his mother. A consistent quality of considerateness in the care he receives from several people probably is better than to be cared for in an inconsistent manner by one person who sometimes is considerate and often is not. Third, the extent to which a child might or might not suffer if separated from a person, such as his mother, will depend not on the fact of separation alone but on many factors, including his experience with people other than his mother and the extent to which he already is on the way to being an anxious child. A child who is transferred from the care of an anxious mother to a mother substitute probably will suffer more "separation anxiety" than a child who has been in the care of a serene and spontaneous mother.

Normally, when a child shows timidity in the presence of strangers in the home environment it is likely soon to wane, although other periods of timidity may follow later in his development. Voices and faces that were unfamiliar tend in time, if they recur, to recede into the realm of the familiar. During a child's career many phenomena of this kind are likely to occur. Through the combined effects of growth and learning, he comes to the threshold of a new discovery or a new experience, or reaches a stage of understanding at which he can appreciate new or different meanings in the circumstances that surround him. Each such new experience will give the child pause. If the event or discovery comes upon him suddenly and overwhelms him, he will be frightened. But in the normal course of things, more and more events lose their arresting qualities and are "laid by" as part of the accumulating total of familiar experience.

After the first half-year of life there is, as one would expect, an increase in the number and complexity of social reactions. Between the ages of six and ten months, babies learn to participate in social

interplay in such activities as peek-a-boo, rock-a-bye, waving a bye-bye, yelling at adults, and begging for attention by means of squeals and grunts. In such activities, the child gives as well as takes.

Response to Other Children

By the age of six months a child is likely to begin to give heed to another child of his own age, and during coming months his interest in other children becomes more active. Before the age of one year, many children will exhibit such reactions as giving heed when another child cries, making active attempts to exclude another child from their sphere of activity, or babbling to other children to gain attention. It usually is not until considerably later that cooperative play with another child occurs.

A "baby-party" technique has been used to investigate young children's reactions to one another. Two or more children are placed together in a more or less standardized situation, and their behavior is observed. In a study by Maudry and Nekula (1939) it was found that up to the age of nine months children showed relatively little social interchange or response to one another; from nine to fourteen months, the children continued to give more attention to their surroundings and to play materials than to one another, and their social interchanges included many negative responses, such as trying to push the other child aside. From fourteen to eighteen months, the children's behavior showed a gradual transition in the direction of more social response of a positive sort. By the age of twenty-five months, their social responses and interest in play materials became more closely integrated, and responses of a friendly and cooperative nature predominated over negative responses. At this age some children likewise seemed to be sensitive to being excluded from a group and showed distinct preferences for particular children.

At the age of two, exchanges of cooperative give-and-take between two or more children are likely to be brief. When several children of this age occupy the same play space they take notice of one another, tend to gather in the same locality a good deal of the time, and make contacts with one another. A good part of the time, how-

ever, the children's activities will be parallel and adjacent—with occasional interchanges—rather than merged into a joint, continuing activity (Parten, 1932). It should be noted also that, at this age, a child's "occupation span"—the length of uninterrupted time he spends on any activity—is likely to be brief, whether he plays with other children or alone.

Group Activities During Preschool Years

After the age of three an increase in cooperative play occurs, and group activities stretch over longer periods of time. With increasing age, there is an increase both in the size of the group with which a child will be in mutual contact and in the duration of group projects. By the age of five or six years, children will sometimes play in groups as large as five or six members or more, but groups limited to about three members are preferred at the later nursery-school and kindergarten age.

Five-year-old children, in a study by Green (1933b), played with three or more children 18 per cent of the time and with two children 22 per cent of the time. Two-year-old children played with three or more children only 2 per cent of the time and with two children 9 per cent of the time, and they played alone 62 per cent of the time. Five-year-olds played alone 30 per cent of the time. Children sometimes play with youngsters they don't like in preference to spending all their time alone.

Although this progress from relatively little social interchange to participation with more and more children can be noted, these developments do not come about through clearly defined steps or stages. A child may return to solitary behavior if, for example, he faces a problem in his own life or in his relationships with members of the group he belongs to. He may be a participator in one group and an onlooker in another; he may return to solitary or hermit-like behavior if, as sometimes happens, he matures more rapidly than his associates or acquires special interests of his own, so that the activities of his former playmates no longer interest or challenge him. Furthermore, at any stage of growth, when a child faces a new group in a new social situation, his first tentative approaches may roughly

reproduce the sequence noted in his early behavior until he begins to feel at home with his new associates.

Later Trends in Group Behavior

The foregoing brief sketch has omitted many forms of behavior that will be considered separately in ensuing pages. It should also be noted that at all stages of development a child's social behavior is interwoven with other aspects of his development. An increase in ability to discriminate and to undertake more complex activities, an increase with age in the child's attention span, an increase in his ability to understand group values and the opinions and customs of others, and improvements in his motor abilities parallel and form an integral part of the picture.

At the age of six, a child's capacity for group formation is still quite limited. He is beginning to show an interest in games that require the participation of several children, but the games in which he joins are likely to be loosely organized games, such as tag (Furfey, 1930), and much of his play will involve make-believe themes that allow for a good deal of individual freedom. In their free activities in class or on the playground, first-grade children are not likely to operate as an organized group involving all members of a class of twenty or thirty children except when directed by an adult.

At the first-grade level, the children who are leaders are likely to lead small groups rather than the entire class. It is not until about the fourth grade or later that a class is likely to act as a whole, united under a common leader, on a common project, originated and directed by the children themselves. However, it is not possible to set an exact time when children will reach this level of development, since their behavior will be influenced by conditions such as past training and opportunity, the urgency or interest value of the project they are working on, the presence of resourceful leaders, the characteristics of the individual members, and the skill of the adult who is with them.

Gains with age in capacity for group action and teamwork are shown in children's out-of-school play activities. As children grow

older, they are increasingly able to identify themselves with the fortunes of a team or club, and they show increased interest and ability in following complex rules of action. In their own activities, children come in time to establish quite complicated regulations as to procedure, the function and role of individual members, precedent in taking turns, and the like. When children of a wide age range play together, they frequently will adapt their procedures to the varying degrees of capacity for teamwork exhibited; thus, whereas the ten-year-old boys in a ball game are expected to take regular positions on the field and to follow a definite order in batting, a six-year-old who may be playing with them is given a roving commission as backstop for both teams, with freedom to drop in and out of the game, and he may even be indulged with irregular turns at bat, and he and other less able players may be allowed four strikes instead of three, and more than three "outs" before their team loses its turn at bat.

In a game of "cops and robbers," the older child is expected to stay "dead" when he is shot until the rules of the game permit him to revive, whereas a younger child may be permitted to peek when he is supposed to be dead, and to interchange roles as the spirit moves him.

Recognition of own status and the characteristics of others. Along with the development of the child's ability to take part actively in more complex social enterprises, there is an increase also in his perception of social relationships and in his awareness of his own status as compared with that of others. As will later be noted in more detail, by the time a child reaches school age, he is likely to understand the meaning of competition and to appreciate how he compares with others in many fields of activity. Children of this age are capable also of a certain amount of self-criticism in the light of their own aspirations and on the basis of their appreciation of the standards set by others, and many of them are sensitive also to ridicule, failure, and loss of prestige. As one result of this a child may become shy and self-conscious in connection with performances that earlier were quite spontaneous, such as singing in the presence of others or joining freely in the activities of a group as though taking for granted that others would accept him.

Early Social Relationships and the Process of Self-Discovery

At the nursery school level, and even more in the kindergarten and elementary grades children receive a vast amount of discipline from one another and they are repeatedly made aware of how others think and feel about them. When children begin to associate freely with one another they enter into what to many of them must be quite a new world of self-discovery. A child may be reminded again and again that others approve of him or he may be told that he is "messy," "dumb," a "cry-baby," a "brat," etc. Parents may have little inkling of what their child faces and undergoes in this respect. And when they do get a glimpse of what is happening to their child they may be surprised, or gratified, or frightened. Sometimes a parent finds it very difficult to stand by when he sees other children harshly punish or ridicule his child. Sometimes a parent will see himself in his offspring and get a new idea concerning himself when he observes how his child is disapproved of by others (as, for example, when the youngster is ridiculed for expecting help in situations in which children of his age manage for themselves). It must be a very painful and bitter experience for a child to be the butt of jeers and name-calling week after week. What is taking place within the ideas and attitudes a child has concerning himself when other children dance a witch's dance around him and call him a "mess" and a "brat" an adult cannot know and it would be difficult for a child to tell. Yet such occurrences are frequent. They must be especially hard to bear if a child is ridiculed because of traits he can do nothing to change—such as his racial origin, or if children reject him for showing the very characteristics that he must preserve to win acceptance with his elders (such as using correct English or being polite to girls).

Social Perception

An important aspect of social behavior and of the development of self-understanding is the development of awareness of others and

their concerns. Progress toward social maturity depends not simply on ability to go through the motions of taking part in increasingly complex social enterprises but also on the development of appreciation of other persons. To enter into a relationship where there is mutuality, a common purpose, and genuine interaction, it is necessary for a person to be able to be responsive to others and their wishes, needs, and intentions. There must be a degree of sensitivity to the thoughts and feelings of other persons.

This awareness of the other may take the form of a conscious perception: A child may make a distinct mental note of the fact that his mother or father "look" particularly pleased, or tired, or angry, or troubled. He may be distinctly aware of the fact that an older playmate is generous in giving a younger one a chance to win, or that a visiting child's hesitation or his shrill laughter shows that he is frightened and uncertain of himself, or that a youngster or visiting adult who boasts loudly about himself must somehow be uncomfortable.

Individual children may reveal that they are perceptive in such ways as these at the age of five, six, or seven. As early as age four there are children who might reveal that they perceive, for example, that their kindergarten teacher was in "a bad mood today, so we had to be careful." However, children differ very markedly in the evidence they give of perception of others. Some youngsters (and many adults) are so wrapped up in their own concerns that they don't seem able to afford to give any thought to others.

It is not alone through a process of recognized perception of the expressions and apparent moods of others that a child shows his responsiveness to the personal concerns of others. A child (like an adult) may be wonderfully flexible and adaptable in responding to others even though he would have difficulty, if we suddenly questioned him, in formulating in words just what are the cues that he is following. In other words, he may show a kind of sensitivity and a subtle kind of perceptivity in his reactions to the moods, uncertainties, fears, desires, whims, likes, and dislikes of others even though he is not very articulate about it. It is likely that the more genuinely

a child is in communication with himself in the sense that he is free to feel surges of anger, fear, joy, sorrow, liking, and disliking that arise in him, whether or not he openly expresses these feelings, the more responsive he can be (if he so chooses) to subtle communications from others. This theory that self-awareness and awareness of others are closely related has not been explored adequately in studies of children.

One feature of awareness of the other person's feelings consists in the ability to interpret expressions of emotion by others. The ability to discriminate between different facial expressions improves as the child grows older. In a study by Gates (1923, 1925), children ranging in age from three to fourteen years were shown photographs of an actress whose facial expressions showed joy, anger, surprise, fear, scorn, and pain. Adults are usually able to identify the expressions which these pictures are intended to show. At the kindergarten level, laughter was correctly named by over 70 per cent of the children; but pain, anger, and fear were recognized by less than half. None of the children of kindergarten age understood the pictures of surprise and scorn. More than half of the children could identify anger at the age of seven, fear at ten, and surprise at eleven. In daily life, with familiar, live faces before them, children undoubtedly can recognize expressions much earlier than they would be able to recognize the mood shown in a photograph of a stranger, but it is nonetheless instructive to note how far some children lag behind the adult in recognizing conventional signs.

During the elementary-school years, children also become increasingly able to formulate in words the traits and characteristics of others which they like or dislike. In a study in which children were asked, among other things, to describe what they disliked in the world about them, an increasing percentage of children from the age of five and upward named people or undesirable traits in people. Six per cent of the answers at five to six years, and 22 per cent at eleven to twelve, fell into this category (Jersild, Markey, and Jersild, 1933) even though the question was not phrased in a manner that would turn their attention to people.

"Natural" and Acquired Aspects of Social Behavior

To what extent are changes in social behavior, such as can be observed during the first few years of life, due to learning and to what extent do they emerge in the process of maturation?

It is impossible clearly to isolate what is due to original nature and what is due to learning and experience; but some observations reported by investigators are interesting. Bühler (1933) noted that the babies in her study began, at about the age of six weeks, to respond differently to the human voice and gaze than to other noises and visible objects: The babies smiled. Bühler recognizes that this smile may possibly be a response that has been learned from the situation of being fed, but she also points out that adults are present in many other situations, comforting as well as painful, in which satisfaction of hunger is not a factor. She considers it more likely that the smile is an "original and primary reaction to the human voice and look" (Bühler, 1933; p. 377). Observations made by Dennis (1938) in an experiment with a pair of infant twins are also interesting in this connection. As mentioned in an earlier chapter, these twins were kept in a very restricted environment until the age of seven months. Among other things no one smiled at them or cuddled, fondled, or played with them. But when they reached the age when babies usually begin to smile to adults, these babies smiled. When they reached the age when babies usually laugh, they laughed, and they also gave signs of affection for their stolid attendants. Such observations do not, of course, prove that this behavior is instinctive, but they do indicate that a child has a potentiality for being responsive to human contacts at an early age and that he can do his share in the process of communicating even though he receives very little stimulation or encouragement from other persons.

On the basis of continuing observations and tests of infants during the first two years of life, Shirley (1933a) is of the opinion that children in the sphere of social behavior show a sequence of activities just as in the motor sphere they show a sequence of developments leading to the ability to walk. She reports, for example, that

manifestations of shyness and self-consciousness during the second year of life (such as we noted on an earlier page) appeared so consistently as to suggest that they were not due to learning alone but were a normal outcome of growth.

Observations such as these do not, of course, mean that various types of social response spring forth full-fledged, apart from environmental influences. Without a social environment, there obviously could be no social behavior.

In his dealings with other persons the child, like the adult, shows many different forms of contrasting behavior: He may be hostile; he may cooperate or work against others; he may be timid or brash; and so on. The remaining sections of this chapter will give separate attention to some of these forms of behavior. A later chapter will deal with other aspects of social behavior and will also consider the impact of varying social and socioeconomic influences on the developing child.

Resistant Behavior

"Resistant" or "negative" behavior is so common in early childhood that it may be regarded as a normal feature of the child's social development. To say that such behavior is normal does not mean that it always runs a healthy course, for it may take forms that express an unhealthy condition. But if a young child in a culture such as ours never asserted himself in a rather stubborn and headstrong way there would be reason to suspect either (1) that he is lethargic and physically below par or (2) that the environment has, for the time being, been so artificially rigged to avoid friction that he will be headed for difficulty later on. It is better for a child to be stubborn in a childish way at the age of two to four than at twenty to forty or sixty.

Signs of resistance, such as the stiffening of the limbs, averting of the head, and firm closing of the lips, can be observed when a child is only a few months old. As usually employed, "resistance" denotes opposition to adult authority and wishes, or aggressions against adults or anyone who is vested with authority or is trying to influence or direct the child's conduct. Actually, much of a child's "resistance"

at first is a feature of his effort to achieve self-help and independence and it is only incidentally a form of opposition to others. Resistance to other children also occurs, of course. Such resistance will be considered in a later section.

There is yet another kind of resistance which in many instances comes to have even more significance in a growing child's life, namely, the resistance he shows to any reminder, suggestion, or influence that threatens to challenge attitudes and ideas he has formed concerning himself. However, other sections of this book will deal with this kind of resistance which is a kind of "ego defense" a person undertakes in an effort to maintain a consistent and cherished picture of himself.

In many children, resistance in relationships with others begins to become most noticeable, roughly, at about eighteen months, with a peak at about the age of three and decline in overt manifestations at about the age of four. (Reynolds, 1928). This is the time when many children are busy in acquiring and in asserting what in daily life we call "a will of their own." Although the resistance a child shows often seems quite unthinking and counter to his own best interests, his efforts to assert himself in this way have profound meanings and are an essential feature of healthy growth. In asserting himself a child cannot avoid some opposition to others.

From an adult's point of view there are times when a child's resistance is utterly unreasonable, and it often is a nuisance. But the child who shows even an unreasonable kind of resistance is probably a far more healthy person than a child who shows no resistance. When a child openly and actively resists, it shows that he has the spunk and the guts to stand up for himself. It shows that he has not been so overwhelmed with overprotection or so crushed by harsh treatment that he dare not struggle in his own behalf. Resistance may be overdone, and it may take forms that reveal an unhealthy intensity of hostility toward others and destructiveness toward self. But the child who resists his elders at home is at least putting up a fight. Likewise, the child who resists a cruel teacher at school and comes home with several "Unsatisfactory's" on his report card is probably a healthier child than one who meekly surrenders to such

a teacher, swallows his resentment, and comes home with a consistent report of "A's," but harbors deep grievances.

A child's resistance is in many ways a threat to the self-esteem of those who care for him. A parent who likes to think of himself as a reasonable sort of person faces quite a blow to his pride when his child rejects his nice reasoning. Even when the parent is convinced that it is the child, not he, who is headstrong, it still is a blow to his pride to realize that one so reasonable as he should have begotten so unreasonable an offspring. Similarly, if the adult likes to think of himself as being an unusually generous and forbearing sort of person, his child's sturdy stubbornness will threaten this cherished self-image, and such a threat is tough on any parent. On the other hand, a child's resistance, although not in itself easy to take, may give parents a great deal of satisfaction. If they are not unduly hampered by a compulsion always to be right and to look right they may get quite a thrill out of their child's self-assertiveness, even when the child is asserting himself against them.[1]

In the young child, resistance frequently takes the form of failure to carry out a request he quite apparently understands, or seeming not to hear or understand, or showing stubbornness in connection with eating and the daily routine, or many other little acts of self-assertion. Children sometimes carry their resistance to the extreme of refusing to urinate until they no longer can retain themselves, of forced vomiting, of refusing to take food or to swallow, or of efforts to hold the breath until blue in the face.

Resistance may also take the form of bickering and argumentativeness and continuous questioning after an answer has been given. An example of this appeared in the case of a two-and-a-half-year-old child who, for some reason, had become extremely disputatious. At one time, his father was telling this boy and two other children about a chicken farm once owned by the boy's grandfather. Some of the chickens on this farm, the father related, were black and some were white. The boy interrupted to say: "Naw, they were not black and

[1] In a study by the writer and others (1949) it was found that in noting what they like about their children, parents frequently mention characteristics which offhand might be regarded as rather unpleasant but which are a mark of the child's individuality and an assertion of his selfhood.

white, they were blue." This form of bickering, after a short time, disappeared almost as suddenly as it had come. In such a case as this there undoubtedly were many factors contributing to the resistant behavior, but it appeared that the child's behavior represented in part, at least, a form of experimentation which coincided with a newly acquired ability to question others and to voice his own opinions.

Resistance may also take the form of refusing to accept reality or refusing to bow to the inevitable. Thus, a child still hungry for pudding may refuse to accept the fact that there is no pudding even though the empty dish is there for him to see.

In a study by Reynolds (1928), "negativism" (resistance) was approached from several angles. Children were rated by their parents and by nursery-school teachers and were also observed under experimental conditions. Negativism was defined as refusal to comply with understood requests. The experimental situations afforded thirteen opportunities to be resistant (such as refusing to repeat numbers and continuing to play with blocks when asked not to). The resistance scores ranged from 0 to 12, with an average of 4.38.

"Negativism" will appear in one situation and not in another. In the study just cited there was no significant resemblance between the negativism scores in the experimental situations and ratings by parents and teachers of the same children. In everyday observations one can verify this. A child may be very stubborn with one parent and not with the other. A child who is stubborn and headstrong at home may be quite compliant and cooperative at school, or when visiting a neighbor. Accordingly, a parent and a teacher might have quite different ideas with respect to a child's tendency to be resistant. What sometimes seems to happen is that a child discovers where and when and with whom he can safely assert himself.[2] A child whose

[2] This fact sometimes leads to some very erroneous (and very aggravating) conclusions. If a child behaves like a little angel with a teacher or relative, and like a little devil with his own father or mother, the relative and teacher may smugly feel flattered with the thought that they really know how to handle kids whereas the child's parents don't. If, however, the child were theirs, and the person who is now the maligned parent came and took over (within the nice protection of being an occasional visitor or within the bulwark of the school), it probably would be the parent who looked "good."

purposes have been thwarted by one person may express his resistance with another. Some children show a sharp, stubborn streak when they come home from a day in nursery school in which they have been outmaneuvered by clever teachers and overwhelmed by the climate of group conformity which some nursery schools succeed in creating.

As children become older they usually show less resistance of the kind mentioned above, but there are exceptions to this. The decline in resistance with age takes place partly because the older child understands better what is expected of him, is better able to comply, and has learned that he will be more comfortable if he complies with the wishes of others whether or not he really feels like it, and also because he has learned to express himself better by means of words and has acquired other more subtle means of asserting his independence. A decline in resistance may also be due to the fact that a child's elders have been learning how to handle issues that are likely to provoke resistance.[3]

Resistance is frequently encountered when intelligence tests are being administered to young children. A child's resistance may mean that he is unable to do what is requested of him, but often lack of ability is not the cause. This appeared in a study by Rust (1931) of resistance during mental tests. About 58 *per cent* of the test items initially refused by the children were passed successfully on subsequent presentations, even though the children received no further help. The chief cause of resistance in the test situation, accordingly, was not the difficulty of what the child was asked to do but rather that the items of the test did not fully enlist his interest and effort. We have here, at the nursery-school level, an illustration of a condition that probably prevails very widely at the elementary- and high-school level (and even at college) where a young person's poor performance in what is required of him may be due to a basic lack of ability but may also reflect a problem of motivation and a lack of positive emotional involvement, taking the form of active or passive resistance. However, at the preschool level and at all later levels through the postgraduate level, it is more comfortable for the self-

[3] For a discussion of negativism in relation to "ego development," see Ausubel (1950, 1952).

esteem of the teacher, or of the one who makes or administers tests, to assume that it is primarily the young person's lack of ability that accounts for his poor showing.

Some contributing factors. Many conditions impel a child to become resistant. He is likely to resist in time if he is often needlessly interfered with, if he is jerked or forced abruptly while already trying to obey a command, if he is frequently caressed and fondled against his wishes, if he is frequently teased or given contradictory commands, or if he is coerced in any way, whether roughly or by a person who is an expert at gentle coercion. His efforts to protest or to protect himself in specific instances are likely to become habitual if he is often provoked. Moreover, if he meets the same person or similar advances in many situations, he may come to resist this person and such advances in other situations as well.

Resistant behavior is sometimes aggravated by the fact that people do not take proper account of the child's limited capacity for concentration. In playing with a child, adults often are tempted to overdo their attentions. If a child is just beginning to talk, for example, it is fascinating to try to coax him to repeat words or to speak new words. Such urging soon becomes tedious to the youngster. Sometimes, too, resistance is a bid for attention, as when a child who is left to care for himself while his mother is attending to a younger brother or sister dawdles, procrastinates, or demands help in what he actually is able to do for himself.

The fact that children show resistance is, of course, not remarkable when one considers how much they are pushed around, even by parents who are patient and wise. The parents themselves are subject to many rules and restraints which they take for granted, and they sometimes expect the child to take them for granted. The culture into which the child is being reared is full of countless regulations. In the matter of eating there are many rules that an adult accepts as a matter of course but that must strike the child as quite arbitrary. He must sit down, not stand, when eating. He may be pleasantly settled with a toy, and then the words "Dinner is ready" come like a mandate from on high. Many safety regulations must strike him as arbitrary (until he has learned through painful experi-

ence). He must not play with pins or touch a hot iron; he must stay away from the oven and not come near when hot fat is on the stove. These are small details, but there are many such.

Even in the best home the young child is subject to numberless "no's" and "don'ts," many of them spoken, many of them expressed through restraining gestures and other techniques that keep a child from forbidden ground. If these could be tallied, it no doubt would be found that the "no's" and "don'ts" to which a child is exposed are far more frequent than the "no's" and "I won'ts" with which he retorts. The fact that a great many rules and restraints are not only inevitable but reasonable from an adult point of view means little to the child. When one considers the amount of regimentation children are exposed to at home and at school the remarkable thing is not that they resist but that they resist so little.

Later symptoms. Although overt resistance usually declines after the fourth year, it persists in one form or another throughout life. As the child grows older, his methods of resisting become more subtle. The child pretends he does not hear or understand, refuses to see the point, persists in referring to a topic that has been closed, makes repeated complaints, assumes a careless manner in executing commands, teases, resorts to indirect recriminations, and employs a number of other devices.

Resistant tendencies resembling those of children often can be seen even in otherwise normal adults, as when an adult chronically "rises" against suggestions, goes out of his way to eat or to wear what he has been advised against, or persists in mannerisms for no apparent reason other than the fact that he has been urged not to.

Children's Fights and Quarrels

As soon as children are old enough to play with one another, bickerings and altercations are common in their group behavior.[4]

Varying causes, motives, and functions. As a child makes his way among his peers, entering now into this activity, now into that, his

[4] For detailed studies of children's conflicts with one another, see Burk (1897), Dawe (1934), Isaacs (1933), and Jersild and Markey (1935).

desires may clash with those of others; he may bump into another, get into another's way, interfere, or enter where he is not wanted, and brief arguments or more vigorous physical encounters ensue.

Studies of children's conflicts indicate that the number of such altercations is correlated, to a high degree, with a child's general activity: The more a child "gets around" and the more contacts he makes, the more he is likely to have collisions with others.

The fact that many conflicts arise in connection with the general flow of his activity is noted by Green (1933a) who observed that quarrels are likely to be more frequent among children who are close companions. Green found that "mutual friends are more quarrelsome, and mutual quarrelers are more friendly than the average," and that "quarreling is a part of friendly, social intercourse at these ages." In other studies, likewise, it has been found that there is a positive correlation between aggressive and sympathetic behavior (Murphy, 1937). Children who are most sociable are likelier than the inactive ones to get into situations where they notice another's hurt and sympathize with him, or bump into another and fight with him, but there are, of course, many exceptions to this.

Combativeness is not, however, a function only of the general flow of a child's activity, for his aggressions against another child may serve many purposes. In the conflicts of children of preschool age, especially before ideas of property rights and inhibitions clustering around these have been fully formed, many of the conflicts involve an effort to procure or protect play material. Thirty-six per cent of the conflicts of nursery-school children, according to a study by Appel (1942) centered around possession of property. Aggressive behavior may also serve the child as a means of winning his way into a group, it may enable him to attract the attention of another child, or it may serve to rebuff the advances of a child he does not want to play with.

In Appel's study it was found that about 23 per cent of nursery-school children's conflicts fell in these categories: (1) intrusion or rejection of companionship, (2) teasing, and (3) cross purposes.

Conflicts between children may also arise because the youngsters are experimenting and exploring. A child will sometimes block an-

other, interfere with his activities, and even take a tentative poke at him not, as far as can be ascertained, because of any animus or ulterior desire for conquest or possession, but more in the interest of experimenting to see what will happen. Again, children will sometimes blunder into a fracas with no initial intention, as far as can be determined, either of stirring up a fight or of gaining anything in particular by it.

A child's aggressiveness may also be an expression of jealousy, as when he goes out of his way to irritate, tease, or hit another child who has received attentions from adults or other children. Further, even though most of the encounters between young children are brief in duration, a child may return again and again to attack another, as though moved by a lingering resentment. Sometimes, one will repeatedly do something that irritates another, as though seeking to provoke an attack so that he, in turn, may "defend" himself by a strong counterattack. Sometimes it is the child who is least sure of himself in his relations with his group who is the most belligerent.

The fact that combativeness may function in different ways is illustrated by the records of two nursery-school children who showed a notable increase in the frequency of their conflicts during the course of the school year (Jersild and Fite, 1939). In one case it appeared that combativeness was a feature of poor social relationships, and in the other case it appeared that it was a feature of improved sociability. One of the children was a boy who, at the beginning of the school year, spent much of his time with a companion whom he dominated; but with the help of the teachers, the dominated child established ties with other children. When the boy found that his hold over his companion had been broken, he tried to establish other contacts. But partly because of his aggressive techniques and small size, he met rebuffs from other children whom he tried to join. They would tell him to go away; he would then tell them to shut up, and they would tell him to shut up; he would hit and they would hit; and thus there was an increase in the frequency of his conflicts. This increase was a feature of difficulty in social relationships.

The other child who also showed an increase in frequency of conflicts was a girl, who, at the beginning of the year, was dominated

to a large extent by a playmate of about her own age. As the weeks went by, this girl became more and more sociable in her relations with other children on the playground, but as this happened, she had to fight off her dominating companion. In this case, an increase in conflicts was, in effect, associated with an improvement in the child's social relationships within the group as a whole.

One factor, among many, which probably encourages a child to show aggressiveness is the example set by other children and adults. An adult's treatment of him may strike a child as a form of aggression, even though the adult does not look upon himself as an aggressive person. For example, when an older child refuses to yield his toy to a young sibling and is then compelled to yield by his mother, the mother's intervention, as viewed by the older child, may not differ materially from his own behavior when he forcibly snatches another child's material.

There are factors in the personality of the child as well as factors in the external situation that dispose a child to be aggressive in his social dealings. According to studies by H. H. Anderson (1937a, 1937b, and 1939) a child's combativeness may be a feature of a more inclusive behavior tendency. Anderson distinguishes between two broad categories of behavior which he calls "dominative" and "integrative." The "dominative" person not only expends energy against others but he also tends to be rigid and static. He is not one who seeks better understanding or to solve differences. He does not seek change but the status quo. "Integrative" behavior, in contrast, as described by Anderson, is more flexible, yielding, spontaneous, and receptive to change. In investigations in which Anderson studied the behavior of young children in the light of these broad concepts he found that children tend to respond in kind: If a child is "dominative" in his behavior, he incites a dominative response, whereas "integrative" behavior induces integrative behavior in a companion.

Differences in combative inclinations at the nursery-school level. In their conflicts with one another children show marked individual differences and some trends that are related to age and sex. Observations regarding this appeared when children in three nursery schools were observed during the course of the year, and a number of them were

reobserved the following year in nursery schools and kindergartens (Jersild and Markey, 1935). A conflict was defined as any instance in which one child attacked another's person or materials or by word or deed interfered with the person, activities, or possessions of another, or threatened by word or gesture to do so, or endeavored by force or verbal demands to possess another's belongings, or to direct another's activities in opposition to the apparent desires of the other child. The conflicts that were noted ranged from brief verbal disputes to fights of a more violent character, involving biting, hitting, pushing, scratching, cursing, and the like. The fifty-four two- to four-year-old children who were observed exhibited an average of one conflict per child every five minutes, but most of these conflicts were very brief (lasting less than half a minute).

At one extreme was a child who engaged in 141 conflicts during the course of the observations, while at the other extreme was a child who took part in only 17; one child made a personal attack on another (hitting, pushing, throwing things at, holding, threatening gestures, and so forth) 87 times, while there was one child who did not lay hands on another, or threaten to do so, a single time.

The frequency of conflicts tended to decline with age (from two to four years), but this was not conclusive. The most notable change that occurred at this age was in the techniques used during conflicts. From the age of two to four years, there was a decline in screaming, weeping, and cries for help. There was a decline also in hitting and other forms of physical attack and an increase in the use of language during conflicts. As children grow older they become more and more adept at using language as a form of aggressive behavior and in many adults such use of language has been developed into a fine art. It would make quite a spectacle if the polite verbal battle between two adults who are vying with each other at a dinner party or a committee meeting were suddenly converted into its psychological and behavioral equivalent at the three-year level.

As children grow older their conflicts with one another tend to last longer, and aggressors and victims alike tend to become more versatile and competent in their methods of combat. In the study by Appel (1942) it was found that when two-year-olds fought with one

another, only 40 per cent of their conflicts extended beyond one stage or "round," while 67 per cent of conflicts between four-year-olds went to two rounds or more.

In the earlier study mentioned above, it was found that among the young children boys and girls resembled each other in their combative behavior. At the age of two years, for example, boys and girls were quite similar in the frequency of their screaming and crying. But with added age, the girls did not exhibit so large a decrease in screaming and weeping as did the boys. The older boys tended to hit more frequently than did the girls and also were aggressive more often than girls. In an investigation by Sears (1951) in which a doll-play situation was used to study aggression it was found that boys showed more aggression than girls and that when girls were aggressive they were more likely to inflict psychological harm than to make a physical attack.

Large group differences also appear when children's conflicts are studied. Children in a day nursery, representing a somewhat underprivileged economic and educational background, entered into more conflicts than did children in a nursery school that enrolled children who came from homes of higher socioeconomic status.[5] Group differences were noted also in the study by Appel cited above. Children representing homes of relatively low socioeconomic status showed more conflicts over possession of material objects than did children of higher socioeconomic status.

Adult responses to children's combativeness. Adults differ greatly in the way they respond to children's fights and quarrels. In about a third of the children's conflicts in one study (Jersild and Markey, 1935), the teachers took steps to stop or settle the disputes. In a majority of such instances the teachers decided the issue against the children who were most aggressive and who "won" a high proportion of their conflicts when left to themselves. Frequently this seemed jus-

[5] At the adult level we likewise can observe that at least in some groups of low socioeconomic status people are quite free to use their fists when they fight, while in more highly educated circles people are expected to fight it out with words. Feelings of anger may run just as high in the latter group as in the former, however, and the aftereffects of bitterness and resentment may be just as intense, or even more intense.

tified, but such favoritism toward the less aggressive child sometimes went so far as to leave him the winner in a dispute where the aggressor might well feel an injustice had been done. It has also been noted that an adult, coming abruptly upon a fracas between children, can easily make a wrong judgment concerning the underlying issue (Fite, 1940). Two children are involved, for example, in a tug of war over a small box. On the surface, it seems that only the box is at stake and that a reasonable solution can be found; actually, however, the struggle for the box may be only incidental to an effort by one of the combatants to get even with the other.

Teachers differ considerably in the techniques they commonly use when dealing with children's fracases. It was noted in one study that some teachers were concerned about putting a stop to the fighting while other teachers made more of an effort to make use of the occasion to help children to learn ways of getting along together (Appel, 1942).

Children's learning of socially approved ways of getting along with one another is not necessarily hastened by an adult policy of preventing fights and quarrels. In one of the groups included in a study mentioned above (Jersild and Markey, 1935), teachers interfered more than did teachers in another group, and, in addition, there was also more passive interference, by virtue of the fact that there usually were three or four teachers in charge, as compared with only one or two in the other group. During the year, when these conditions prevailed, the much-interfered-with children fought less often than did the children who had more freedom to fight it out. But the following year, when children from both groups moved on to two kindergartens, in both of which the teachers interfered relatively little with the children, a different turn of events appeared. The previously little-fighting and much-interfered-with children doubled the frequency of their conflicts. On the other hand, the previously little-interfered-with and much-fighting children, instead of fighting even more when allowed a greater degree of freedom, actually did slightly less fighting than during the preceding year.

Such a finding as this does not mean that a child of three or four has within him a certain amount of fight which he must get out of

his system; rather it suggests that children must practice and have experience in order to gain in understanding of what to expect of one another and how to deal with one another.

The fact that peaceable techniques can be expedited with adult help is shown in an interesting study by Chittenden (1942). Children who were rather domineering, and who were inclined to use force, threats, commands, and criticism in dealings with other children were singled out for special attention. Play situations (in which dolls were used in the role of preschool children to set up such social situations as those a preschool child himself faces) were arranged in an effort to help the children to understand and interpret social situations and to learn cooperative techniques.

Conflicts of older children. As noted above, open fighting and squabbling usually decline from the preschool period into the elementary-school years, although most children continue to have occasional battles and some children maintain continuing feuds with siblings or neighbors. Many factors, both in the child and in the environment, contribute to a decline in bickering. The child's increased understanding of property rights eliminates many conflicts on that score. One investigator (Eberhart, 1942) found that most children at the age of six had a workable knowledge of property rights that are involved in the ordinary social dealings of children at that age. The child has more understanding also of other children, what he can expect from them, what they will tolerate from him, and what might happen to him if he is combative. Increasingly, also, the child understands and accepts the unwritten rules and codes of group behavior which children impose upon one another.

The decline in combativeness is probably more apparent than real, however, for there may not be a corresponding decline in feelings of hostility. The youngster learns to conceal or disguise his feelings. He learns many subtle techniques for avoiding or repelling persons who offend him and for seeking out persons who are congenial. Moreover, while there is a decline in provocations of some kinds, there may be an increase in other kinds, notably in connection with various forms of competition in games, in classwork, and the like.

Toward the end of preschool years, and more especially during

the school-age period, many children show an interest in fighting as a sport. Some boys assert with pride and with a smile that they "like to fight," and one of the things many boys will claim when asked how boys differ from girls is that "boys fight, but girls don't fight much." In many seemingly playful combats, however, there is likely to be more than a sheer sporting interest. A certain amount of animus and a good deal of self-assertiveness frequently enter in. Anger may rapidly mount on both sides, even if the bout began on a rather friendly basis. Fighting of this sort may spring from many motives, including maladjustments of various kinds, but it also is part of a child's experimentation in social living and a means whereby he tests his powers and explores his status within his group.

In school, unless conditions are exceptional, there usually will be fewer physical altercations in the elementary grades than in nursery school or kindergarten, partly because older children usually work on supervised projects while school is in session. Where enough freedom prevails, children will, however, attack each other in the classroom on occasion, sometimes in a spirit of mischief or fun, sometimes in a spirit of genuine hostility. Hostility often finds expression in the criticisms children make of one another's work at school.

It frequently happens that critical comments and hostile reactions will be directed especially toward one or two members of a class whose behavior is annoying. As noted elsewhere, in observations of small groups of children, Lewin, Lippitt, and White (1939) found that aggressiveness in the relations of children may be intensified by the restraints imposed by adults who supervised them.

Aggressions may become quite cruel, especially when several children band together against a single child or a minority group. Sometimes children's cruelty and intolerance may reflect, in part, a lack of understanding. An elementary-school class, at Christmas, presented a corsage to the teacher with a note: "From all of the class, except Bill." It was discovered that poor Bill, who was thus pointedly condemned, had the will but not the pennies to contribute; some of the other pupils, similarly poor, had borrowed money from the very teacher to whom the gift was presented. but Bill refused to

do this. Most adults would regard his stand as quite admirable, but it is unlikely that this fact would remove the sting of being censured by his own classmates.

Frequently, in groups of children who have known one another for some time, the members of the group come to recognize a more or less clearly established hierarchy of dominance, with a child at one extreme whom all of the children, by mutual consent or through bitter experience, look upon as the best fighter and who had better be left alone, and at the other extreme a noncombative child whom no one fears—whereas other youngsters occupy positions between these extremes.

In their own way, children frequently build up many unwritten rules of combat. Certain methods of attack, such as throwing stones or using icy snowballs, are frowned upon; a child should "pick on" someone his own size; certain tactics are permitted in fights between boys but may not be used when a boy fights a girl (although this rule frequently breaks down at home in fights between brothers and sisters); hostilities between members of a group must be buried when the group is attacked by another gang; and so forth.

Teasing, bullying, and disguised hostility. Beginning early in preschool years and extending throughout childhood, children use a large variety of aggressive techniques that fall short of physical combat. Teasing often occurs in the relations of children in the same family who goad each other to anger but dare not openly hit. At school, children devise many techniques of teasing. Teasing and scurrilous nicknames are much used in children's efforts to discipline or hurt one another.

In some ways, teasing is a more serious sign of emotional stress than outright fighting. A child who teases is expressing hostility, and it may be hostility of a very vindictive sort, but he does not have the freedom or the courage to express himself in an open and forthright way. When a child fights, it often (but not always) means that he is acting on the spur of the moment: Someone bothered him and he struck back, and when the episode is over, he perhaps forgets it. Usually, however, when a child teases it means that he is not just reacting to an immediate annoyance but he is expressing a

kind of ill will that has carried over from the past. This is especially true if he goes out of his way to tease someone who is not bothering him at the moment, and if he takes after a person who goes out of his way to avoid giving offense. So when a child is an habitual teaser we may assume that he has a grievance and is expressing it. When he openly fights, without seeming provocation, or goes out of his way to stir up a fight, the same probably is true, but at least he is forthright about it, and he gives the other person a chance to fight back on equal terms.

This does not mean that we should condone a child for direct warfare and condemn him for such oblique and furtive aggressiveness as is involved in teasing. The fact that the child has a habit of teasing may mean not only that he has a grievance but also that he has been disciplined so severely that he is frightened and dare not openly show his hostility. So his teasing tells something of his relationship with the person who is the butt of his teasing, but it may reveal even more concerning the relationship between him and the adults who have disciplined him. Further, the child who teases is not only involved in complicated relationships with others but he may also be rather confused in his relationship with himself. He not only feels hostile (otherwise he probably would not tease), but he also is in conflict about his hostility: He has an impulse to hurt others, but he cannot really let go. So he compromises by hurting a little.

Occasionally a child will join others in teasing someone even though he bears him no ill will but is simply following the crowd. Usually, however, there is bad feeling behind teasing, and the child who is inclined to tease is expressing tensions and problems in his own life. An interesting sequence in behavior of this kind in a summer camp is described by Osborne (1937). When first introduced into the camp, a child was the butt of much teasing and bullying, partly because of certain "babyish" traits. As he continued in camp, he changed his ways, but during the transition (i.e., while in the process of becoming adjusted to the group), he went through a stage when he in turn teased and bullied other children. Thus he was expressing some of the hostility that had been aroused in him

by the teasing he had received. As time went on and as the child's poise and ability to get along in the group improved, he abandoned teasing and bullying.

As a child becomes older and more clever he may be able to express deep hostility even though he never lifts his voice or raises his hand to strike. He may use the technique of eloquent silence or pointedly ignore others or persist in argumentation of an apparently disinterested and very tolerant sort. A skillful antagonist may even use a crusade of apparent good will as a means of attack upon individuals or groups.[6]

Sympathy

An important factor in the social relationships of older children and adults is the capacity for sympathy and fellow-feeling. Unless a person eventually, in the course of his development, becomes sensitive to the joys and sorrows, hurts and satisfactions, and fears of others he will not be able to enter into any degree of close relationship with them. It is through emotional responsiveness to others, rather than simply through an intellectual perception of what they are about, that social affinity is established and social loyalties are maintained.

Signs of sympathy appear quite early in childhood (within the first two years), but the ability to perceive and appreciate another's good or ill fortune depends in part upon the maturing of the child's own ability to perceive wherein his own fortunes are involved. A child cannot, for example, sympathize when another has been humiliated, or is worried about the future, until he has some appreciation, in terms of his own experience, of the meaning of what has happened or what might happen. Moreover, at any age, a person's sympathies will be influenced not only by his ability to perceive but also by the degree that he is free to take account of another's good fortune or distress. The more a person is absorbed in his own difficulties the less freedom he will have to give heed to others. Other emotions

[6] The subject of aggressiveness in social relationships is discussed also under the headings of prejudice and anger in other sections of this book.

may block a sympathetic response. If a child is frightened, for example, by the meaning of another's distress (as when another child is crying because of ill treatment from persons whom the youngster himself is afraid of) he may be so absorbed by his fear and by the need to guard or defend his own interests that he is unable to be wholeheartedly sympathetic with the one who cries.

Expressions of sympathy in young children can be observed in such acts as helping, removing or attempting to remove causes of distress, comforting, punishing the cause of distress, protecting and defending the distressed person, warning, telling an adult or some other child about another's distress, questioning to discover the cause of distress, suggesting or effecting a solution, and such anxious or disorganized responses as staring with an anxious expression, evidences of worry, head shaking, frowning, compression of lips, and crying and whimpering (Murphy, 1937).

In the same study by Murphy, it was observed that children of two and three years of age do not tend, in general, to respond sympathetically to such stimuli as black and blue wounds, swellings, lumps, and other minor distortions of flesh which to an adult would suggest discomfort or illness, or to the account of Red Riding Hood being eaten by the wolf, or pictures of accidents, of funerals, or of someone crippled or carrying crutches. Younger children apparently have not, in general, acquired the level of discrimination and perception to recognize these phenomena as signs of distress. A child of this age might, for example, recognize conspicuous bandages or the flow of blood as a sign of distress, but fail to recognize a bruise or swelling. Murphy found that many three-year-olds, but not all, would respond to distress as indicated by bandages, blindness, bruises colored with iodine, red swellings, scars, scratches; by deprivation of toys, food, or of mother; by physical confinement, such as being caught in a pen; by interference of activity suffered by a child who has to stay in bed or is not able to run or play; by frustration of activity; by being attacked by another person; by evidences of an accident, such as falling; and by crying.

In direct observation of two groups of nursery-school children, Murphy found the following incidence of expressions of sympathy:

	Hours of Observation	*Number of Sympathetic Responses*	*Number of Unsympathetic Responses*
Group *A*.	188	318	195
Group *B*.	234	398	60

The children in Group *B* represented a wider age range and higher average age and had a larger playground than the children in Group *A*. The ratio of sympathetic to unsympathetic responses, initiated and received, varied considerably from child to child.

Older nursery-school children in the study cited above tended to show sympathy more frequently than did younger children. Older children responded to a wider range of distress situations and, as noted above, they were more likely than the younger ones to try actively to comfort, help, and defend. The younger children were more inclined to stare or to ask anxiously about the distress of others. However, within a given age group, factors in the personality of the individual children were more important than age. Likewise, although intelligence appeared to contribute to the quality of sympathetic responses and to the insight a child might have into the distress of another, the factor of intelligence was less influential than were other factors, such as a child's social interests and responsiveness to other children.

When the children in Murphy's study were rated with respect to sympathy and aggressiveness, the scores showed a positive relationship; in other words, the children who most often sympathized tended also most often to be aggressive. There were notable exceptions to this trend, however; one child, for example, stood near the bottom in his tendency to be sympathetic and near the top in his tendency to be aggressive.

Influence of varying motives on sympathetic behavior. A child is likely to vary from time to time in his display of sympathy. A child might be quick with his sympathies when he comes upon a situation in which another child is in distress, but show just the opposite response if the distress and wishes of the other child are in conflict with his own desires. Again, if a child's initial effort to be sympathetic is rebuffed, he may become aggressive and change from

a friendly to a hostile response. This change in attitude sometimes can be seen when a child tries to befriend a hungry kitten and then discovers that the kitten tries to scratch him or run away. Furthermore, one child may be sympathetic when he himself is somewhat afraid and insecure and then grow less sympathetic as he gains in confidence, while another child may show the reverse tendency. Also, as a child becomes more at ease in the group, there may be an increase both in his aggressiveness and in his readiness to show sympathy. One child, while in the position of trying to win favor with his fellows, may be more sensitive to their needs, not only because of his wish to please them, but also because of his tendency to see his own apprehensions reflected in others. Another child, also insecure in his relations with the group, may be so wrapped up in his own problems that he is unable to perceive the distress of others.

Variations in response were noted in Murphy's study in connection with experimental situations that were used to bring about a sympathetic response. In one such situation, the procedure was to leave the child alone at the side of a play pen in which a two-year-old baby girl was confined. If the subject did nothing, the experimenter would ask such questions as: "She hasn't got any of her things, has she?" "What do you think she wants?" The experimenter later started to pull out the child, behaved as though she had difficulty in doing so, waited ten seconds for help, and then asked for help. The responses of children to this situation varied from inaction to immediate and wholehearted concern about the predicament of the little child. There was little relationship, however, between the children's responses in this situation and the responses of the same children in their contacts with one another on the playground.

When eighteen children were presented with a variety of situations designed, like the foregoing, to elicit sympathy, five of them were quite consistently unsympathetic. Seven were quite consistently sympathetic, and six children showed no consistent trend.

If a study were made of older children and adults it probably also would be found that they show great variations in their tendency to be sympathetic. To be sympathetic a person must not only be

sensitive but he also must possess, so to speak, an extra emotional capacity which makes it possible for him to give of himself to others. For this reason, it is not necessarily the ones who are poor who are best able to sympathize with the poor, or those most needy who can best sympathize with those in need, or those who have been most sick, or frightened, or bruised, or broken on the rack of experience who are best in a position to sympathize with others in similar distress. Unless a person has known such distress he cannot grasp the meaning of another's distress, but suffering alone does not beget sympathy, nor does pain alone produce compassion. To be able to feel in behalf of another, the one who has suffered must be able to turn his suffering to account so that he learns from it, and through it grows in awareness of his own feelings and in appreciation of the plight of others.

In like manner, the severity of another's distress is not necessarily the factor that determines whether sympathy will be aroused. Unless a child is an unusually sturdy character, signs of extremely intense distress in another may be very frightening. Moreover, the ability to sympathize depends on what the child himself has at stake.

In observations of pairs of sisters, McFarland (1938) noted that a child's tendency to sympathize with another child depended not simply upon the degree of distress shown by a sufferer, but upon the child's relation to this distress. For example, if one child's distress jeopardized the security or interests of another, the sympathetic response was frequently inhibited. Likewise, a child would sympathize with her sister when the sister herself had got into trouble or when her distress was caused by someone else, but would fail to sympathize when she herself was the cause of distress. McFarland noted also that children who were very responsive to the distress of their sisters tended also to be sympathetic toward others who were in distress. This observation indicates that sympathy, like charity, begins at home. In fiction characters are sometimes portrayed who are abused at home and then show an unusual wealth of sympathy for others when they leave home and go out into the world to make their own way. Such a turn of events might occur, but it is more

likely that the child who is consistently mistreated at home will be bitter in his attitude toward people there and in his attitude toward all other people.

Competition and Cooperation

From the time when children just are able to take part in active, social interchanges with one another they show both cooperative and competitive behavior.

Cooperation and competition have many elements in common, and activities which outwardly appear to be competitive or cooperative may have different and quite mixed motives behind them. Competition usually denotes a struggle or contest in which one individual seeks to equal or excel another, or to secure objects, recognition, prestige, attainments, or honors also sought by others. Cooperation, on the other hand, involves joint action with others on a common enterprise toward a common goal. Although we often think of competing and cooperating as though they are opposites, this is not necessarily the case, for it often happens that both are parts of a larger project. Many competitive games involve more cooperation than competition, just as many cooperative ventures entail a good deal of competition between individuals who are joined in a common interest. In a game of baseball, for example, children compete vigorously but unless there were a great deal of cooperation they would not come together in the same place for the same purpose or follow the rules of the game.

In the everyday life of children, it frequently is very difficult to judge whether children are competing or cooperating. In connection with a class project, for example, one pupil may make a contribution primarily to promote the work at hand, while another child, or the same child at another time, is simply trying to achieve recognition. Frequently the underlying motive is difficult, if not impossible, to appraise, although the pattern of a child's behavior from day to day is likely to provide some clues. In passing we might note that the child who is not actively competing may in actuality be highly

competitive in his attitude: His own standing may mean so much to him that he will not join in group activity for fear that he won't make a good showing.

It is difficult not only to make an absolute distinction between competition and cooperation but also to estimate the relative value of the two forms of behavior. At first glance it appears that as a competitor a person asserts his own interests; as a cooperator, he promotes the interests of his group. Moreover, even when competition does promote self-interest it may be of value to the group. But this is only a part of the picture. It is both through competition and cooperation that the growing child finds himself, discovers his resources, and tests his abilities. When he races another child he is not just trying to assert his superiority—he is testing himself. It is partly by vying with others that a child finds a standard or measuring rod from which he can get an estimate of himself. Cooperative activities also give a child a chance to discover himself and to explore and develop his capacities for dealing with others.

Rivalry. During the first few weeks of life, the child's behavior cannot be described either as competitive or cooperative, but within the first two years many children show signs of rivalry for the affection and attention of others.[7]

Signs of rivalry in matters of prestige and accomplishment usually are later in appearance than symptoms of jealousy for the affections of parents, but many children at the age of two, and more thereafter, are likely to show some awareness of what the other child is doing and to be sensitive to their own showing as compared with that of other youngsters. Such expressions as "I am older," "I am bigger," "Mine's nicer" are among the milder forms. One child, on learning that today was the birthday of a playmate, proceeded not only to claim that today was *his* birthday too, but also to go the rounds inviting children to his birthday party.

In such verbal "I am-better-than-you" battles, the child with the superior vocabulary may have quite an advantage, as illustrated in the following encounter between two five-year-old children:

[7] Sibling rivalry as an expression of jealousy is discussed also in Chapter Eleven.

John: I can count up to 100.
Frank: I can count to 1,000.
John: I can count up to a million.
Frank: I can count up to a billion.
John: I can count up to a trillion.
Frank: I can count to infinity.

The rivalry children in the same family show toward each other will be influenced, of course, by emotional currents in their relationships with other members of the family, including the attitudes of their parents.

The parental attitudes which affect children's rivalry will be influenced by experiences which the parents themselves have undergone in their own lives. In a series of three case studies Hilgard (1951) has offered interesting illustrations of how a mother's childhood rivalries may persist in her life as a mother and influence the behavior of her children who are potential rivals. Hilgard states that a woman who has not resolved her own feelings of rivalry toward her siblings when she was a child "will in all probability set the stage for the reliving of the old drama, once she becomes a mother." She may continue the old battles and may relive her own childhood competitive struggles in the competitive struggles among her children.

It is not until after the third year that a large proportion of children show rivalry concerning accomplishment, such as are displayed by children in the elementary grades. In a study by Leuba (1933), children aged two to six years were observed in an experimental room, singly and then in pairs, where they had an opportunity to play with a peg board. In the two-year-old group, the presence of another child did not seem to have much influence on what a child did or said. The children did not compete much but showed an interest mainly in the materials before them. Three-year-old children were competitive; they were interested in the social situation but showed awareness of what the other child was doing. At four to six years, a majority of children manifested a desire to excel and an increased degree of understanding of the idea of excelling. At six

years, some of the children also showed an increase in critical judgment of their own work.

A similar increase in competitions was observed in a study by Greenberg (1932) of children aged two to seven years, in a situation where children played with blocks. Children aged two to four tended to pick up blocks as they needed them, but four- to seven-year-old children more often cornered a supply. There was an increase with age in children's favorable remarks about their own work and steady increase from one year to the next in the percentage of children who exhibited various signs of competition (the percentages at the successive age levels of three, four, five, and six years were, respectively, 42.6, 69.2, 75.4, and 86.5).

The influence of competition on the behavior of children of kindergarten age was noted also in a study by Wolf (1938) which dealt with the ability of children to persist in a task. The children stayed longer with a task, on the average, when competing than when working alone. However, some children responded much less to competition than others.

Many instances of rivalry were also noted in a study by McFarland (1938) of twenty pairs of sisters. Individual children were aroused to rivalry by different types of situation. One interesting observation was that pairs of sisters who showed rivalry most frequently were about as companionable as those who showed less rivalry.

Competition at later age levels. At the elementary-school age several studies have shown that children are likely to try harder or to accomplish more when working for themselves or for individual honors or rewards than when working for the group (Maller, 1929). Yet, if the flavor of a group versus group contest can be injected, many children are likely to exert themselves more than when this element of competition is lacking (Hurlock, 1927). Maller found this especially true when the group is one of the children's own choosing. However, not all situations in which children do more work when they are competing provide a good test of the relative strength of competitive and cooperative tendencies. The experimental situation used with older children may simply touch off specific habits of competition that have already been established, so

that the dice are already loaded in favor of competition. For example, after children have struggled individually to master problems in addition, it is only reasonable to expect that they will apply themselves more energetically when competing with other individual performers than when they are asked to work hard to raise the general average of the class. A real test of cooperativeness would require situations about which children actually feel some concern.

In general, competitive enterprises among children are likely to be most zestful when the competitors are about evenly matched, although there are many exceptions to this. Often, when an older and younger child are competing in a foot race, the abler child will voluntarily assume a handicap or give the other a "head start," in order that there may be a semblance of a contest (however, such sporting tactics are less likely to appear if there are spoils for the victor at the end of the race).

Motives and values. The issues over which children compete vary from child to child, and the motives underlying competition also vary greatly. A child may be highly competitive in one group and not in another. A child may applaud and feel delighted when some of his associates equal or surpass him but react in quite the opposite manner when others, with whom he does not feel as closely identified, succeed under similar circumstances. A child may find satisfaction in the success of a youngster who is not especially his friend but who defeats a rival of the child. Behavior that appears highly cooperative or even self-sacrificing may spring, indirectly, from competitive motives, and, contrariwise, a person may show his cooperativeness by plunging zestfully into a competitive enterprise. Among adults, one group of individuals may cooperate zealously to foster or protect a competitive mode of life, while others enter into spirited competition to promote a cooperative society.

In countless practical situations, the presence of a pacemaker and competitor may be of value, not only in the doing of a specific job but also in the larger sphere of habit formation and social conduct.

Competition serves many purposes and can have many values in the child's development and in his everyday life. Competititon gives

the zest of social interaction to tasks that otherwise might be boring. Through competition the child can be helped to discover the reaches and limits of his abilities. The pace and performance of others may provide the child with a standard and measuring rod which may have a stimulating effect on his own activities. In a competitive setting a child may, for example, discover capacities within himself which he had not realized. He may, for example, discover that he can wash the dishes in one-half the time he thought was necessary, and get dressed in much less time than was his custom. He may discover that he is able to endure and enjoy the water of a cold stream or lake which otherwise he would shrink from plunging into, that he can concentrate vigorously on a task for ten or twenty minutes more than he otherwise thought was possible, and so on.

Unhealthy aspects of competition. Competition also has its unhealthy implications. Very often, the competitiveness of older children is not tied to a process of self-discovery or to adventures in group relations, but it has instead a kind of driven quality.

Competition is unhealthy if the child's own estimate of himself and of his worth is tied to the extent to which he can outdo others. It is unhealthy if the child has a tendency to regard himself as contemptible and inferior unless he can prove his superiority to all comers. Competitiveness has a morbid quality if it includes feelings of vindictiveness, so that the child not only seeks to prove himself by triumphing over others but also gloats over his triumphs and feels that victory is sweeter if it makes the other person unhappy. Again, competition has an unhealthy quality if the child, when he does not succeed in winning, feels bitter toward himself (or others), feels inclined to mope or to carry out vengeful speculations, or feels that he has to grit his teeth and train hard solely to prove he can win, even though the contest in itself has little or no value to him. Such would be the case, for example, if a child seeks to be elected to a class office, or to be the head of a little committee, not because he likes the job or feels he can contribute something but simply to show that he can win the job.

Competitive pressures also are unhealthy if they force a judgment of failure and defeat even on those who do not, of their own accord,

have a compulsion to compete. A child who is interested and enterprising but who originally does not have a keen, competitive impulse might become doubtful of his worth when he notices that the school he attends is so ridden with competition that everything seems to require a rating, a mark, or a grade based on an external measure of achievement or success. When a child in such a situation notices that teachers seem to be slaves of a competitive system it will be difficult for him to see how a teacher could like him and respect him when the teacher knows he stands well below the middle rank in his spelling, arithmetic, music, or some other occupation. A child has to be very sturdy if he is to keep his confidence in himself when called upon to face constant reminders of his inferiority. Reminders of inferiority are inevitable in a school which stresses competitive standards, for it is of the essence of a competitive standard that only the one who wins top place or almost top place really has achieved something that counts. So a very able child, matched with many other able children, can get the impression of being a rather inferior character because competitive situations are usually so rigged that only a few can win.

The disease of competition shows itself most strikingly in some schools at the time of graduation when a few select children march self-consciously again and again to the stage to receive a prize for this or that, while the other children are expected to applaud politely. Commencement exercises in high schools sometimes stretch over a period of hours when this practice is carried to barbaric lengths.

Competition is especially unhealthy when the pressure is so strong that a child who had a good set of interests and work habits of his own loses confidence in his own interests and accomplishments. A child may become so imbued with the conception that he is no good unless he makes high marks that he will strive to make high marks even in activities which are, for him, in other respects, meaningless and useless. He is like a college student who aims for a "straight A" record even though some of the courses he takes are not, insofar as his interests and development are concerned, worth a bit more effort than is necessary barely to get a passing mark. So a competitive standard may result in a kind of moral surrender.

Another unhealthy aspect of competition is that an evaluative system based solely on an external standard is likely to be narrow and capricious. When competitive pressures are in control the paths to glory are likely to be limited to those the most aggressively competitive people are best able to follow. In a particular school the competitive struggle may be determined to a large degree by a few people who are in authority or who, for one reason or another, are in a position to determine what counts and what does not. The more a competitive program caters to a limited range of abilities which only a few people possess to a marked degree, the more it tends to give an artificial kind of reward to a few.

Another unfortunate effect of the competitive approach to life is that it often encourages a kind of callousness, if not downright cruelty. Where a competitive standard applies, the child is not respected for his basic humanity; he is respected to the extent that he does better than others. He can be somebody only if he succeeds, in a sense, in putting others in a position of being nobody. When this is the situation he can rise only by trampling on others, although the rules of the game usually are such that the trampling must be done in a very polite way.

Competitive standards give little recognition, if any at all, to the child who was not the first to cross the finish line but who entered the race even though he knew he was handicapped. Yet if gameness were the criterion, he should get the prize. Competitive standards give a medal to the winner of the oratorical contest but they may quite ignore the one who, in joining the contest, scored a magnificent triumph over his shyness, even though he did not surpass someone else's skill.

If, on Commencement Day, it were possible to project on a screen a filming of the struggle that each student has gone through, the hurdles each had to scale, and the difficulties each had to overcome, and a jury viewing it were asked to draw up an honor roll we might find that it differed from the roster of honored names on the printed program. Many names would probably be listed which, by ordinary competitive standards, would go "unwept, unhonored, and unsung." What is more likely is that as the members of the jury

came to know the drama of each child's life he would more and more resist the idea of singling out any one for mention above the rest.[8]

Competition becomes especially burdensome when it goes beyond enterprises that give zest to life and that have a quality of spontaneity and becomes instead a chronic, compulsive form of behavior. A highly competitive attitude may be a sign of underlying fear and insecurity (see, e.g. Horney, 1937). It may also be a sign of hostility. It may mean not only that the individual feels hostile toward others but also that he expects them to feel hostile toward him. Often it appears that a person's competitiveness bars him from winning the very approval he is seeking so hard to gain. Competitive attitudes acquired in childhood frequently make life harder at the adult level.[9] A person may be so driven that he is unable to enjoy his work or his play but is compelled instead with each new success to expend new effort in protecting his reputation and in increasing his power. He may go to great lengths to oppose or to evade criticism; he may strive to avoid contact with others whose work rivals his own; he may reject new ideas, largely because he did not originate them himself. In these and other ways he may be barred from easy and friendly relationships with his fellow men. The more his competitiveness thus takes the form of self-protection, the more of a burden it becomes to him and the more of a liability it becomes to society at large.

Apart from the foregoing there is the more or less obvious point that artificial or forced competition should not in general be used as a means of motivating children's learning. In everyday life people do

[8] According to this view, the more fully we appreciate another's struggle the less desire we would have to triumph over him or to profit (through taking first place) from the fact that he is so inferior that he can win no more than second or last place. John Greenleaf Whittier caught something of the meaning of this when the girl "In School-Days" says to the boy ("As if a fault confessing"):

> "I'm sorry that I spelt the word:
> I hate to go above you,
> Because,"—the brown eyes lower fell,—
> "Because, you see, I love you!"

[9] In a study of competitiveness in rats, Frederickson (1951) found evidence that rats that went through a limited period of competition for food during infancy would later fight for food even when not hungry.

not read, for example, in order to excel someone else in reading: They read to get practical information, or to enjoy a story, and the like. To conduct a reading class in the manner of a contest, with each child trying to outdo the other as a reader, may be stimulating to some children, but it is an artificial procedure, out of line with the genuine functions and usages of reading. Much the same can be said with respect to all other specialized forms of learning.

Cooperation

Conflict and competition usually attract more attention than do friendliness and cooperation, with the result that the former types of behavior are overemphasized whereas a large number of cooperative acts come to be taken for granted. Actually a child is likely to be more cooperative and friendly than competitive and hostile.

The findings in a study by Mengert (1931) are instructive in this connection. Two-year-old children were observed when brought into a small playroom in pairs during twenty-minute periods. Each child in the study was paired with each of the other children. When responses were tallied, those which could be classed as overtly friendly outnumbered the overtly unfriendly responses by more than four to one (the respective average scores were 89.5 and 20.5).

The proportions between friendly and unfriendly responses vary with different children and in different situations, but it is significant that in studies of young children the balance has run strongly in favor of the friendly forms of behavior. Indeed, even children who are quite outstandingly aggressive may show more friendliness than hostility. In a study by Jersild and Fite (1939), it was noted that two children were outstanding with respect to the relative frequency of their conflicts; in both cases, however, social contacts that did not involve conflict outnumbered those in which aggressions occurred. The fact that a child tends to be friendly rather than hostile in his initial response to a newcomer appears from a study by Wright (1942). Children in this study gave desirable toys more frequently to strangers who were introduced into the experiment than to their

own established friends. According to this and other studies, a child does not subscribe to a philosophy of *bellum omnes contra omnium.*

Such findings as the foregoing suggest that the potentialities for friendly, cooperative behavior are as strong as, or perhaps stronger than, the potentialities for behavior that involve self-assertion at the expense of, or in opposition to, others. When one considers that friendly relations with others usually are comfortable and rewarding and the fact, as noted above, that competitive attitudes toward others may become very painful and burdensome, it is remarkable that so little systematic effort has been made in psychological and educational research to discover how best to help children to cultivate their potentialities for friendly dealings with their fellows.

An indication of what might occur if at school, for example, an effort were made to promote a cooperative rather than a competitive atmosphere appears in a study by Stendler and her associates (1951), who compared the behavior of children when they worked for a common reward as distinguished from an individual prize for the best performer. Under the former conditions, children showed more positive interactions, such as friendly conversation, sharing of material, and helping. When competing for individual honors, on the other hand, they showed relatively more negative interactions, such as unfriendly remarks, appropriating material, and efforts to obstruct or dominate one another.

The Role of Association with Peers in the Process of Self-Development

The experiences a child has with his peers from the age of two or three and on into adolescence not only help him in social aspects of his development, but they also are necessary elements in the process through which he finds himself as an individual in his own right. His association with his peers is a part of the weaning process through which he changes from complete dependence on others into becoming a person who can hold his own with his own age group and move with his age group into youth and adulthood as an equal. So the child's life with his peers is important from an emo-

tional point of view and from the point of view of the development of his conception of himself.

One of the many paradoxes of development is that this form of individual independence—the ability to become an individual in one's own right—must be hammered out in a social medium. A child cannot learn to become independent by living in solitude. Robinson Crusoe, in the story, existed in solitude for over twenty years, but he was not independent during this time, nor living as a man in his own right, in the meaning here intended, for he was constantly tortured by fears arising out of his solitude, and during his solitary existence he was constantly preoccupied with a desire to escape from his solitude.

In the development of the child, association with peers, sharing thoughts with them which he does not share at home, arriving at decisions, and entering into activities which he and his peers do not have to make an accounting of to their teachers or to their parents constitute important features of the process by which the child learns to stand on his own feet.

Adults as Peers

A parent or a teacher, however chummy they may be and no matter how eager they are to associate with the child on his terms, cannot fully take the place of a child's peers in the child's own process of developing as an independent person. But some older people, while retaining their integrity as older people, are able to act like children and to enter wholeheartedly into the spirit of childlike fancy, work, and play. A peer relationship is not, accordingly, limited only to persons of similar age but may include relationships with younger or older persons. Therefore when a child seeks to be with his peers, and when it is maintained that association with peers is essential to his full development, this does not necessarily mean that his companions be of just the same age as he. There can be considerable leeway in age, depending on how fully the child and his associates can draw upon their capacities for

sharing experiences characteristic of a wide range of social maturity.

Some adults have a great talent for spontaneous fellowship with children. Moreover, an adult may be able to join more wholeheartedly with some children than with others and more in some areas of experiences than in others. A forty-year-old father may, for example, be able to plunge into a game of hide-and-seek with his six- and eight-year-old children with such abandon that he is as good as any other playmate. But he is just a hindrance to twelve-year-olds who like to mix the coy beginnings of romance in their hide-and-seek. A fifty-year-old man who still has a boyish enthusiasm for collecting stamps may lose himself in a common activity of search and barter and subtle communication with a stamp-collecting child of eight or ten or twelve. A parent may even enter into a relationship in which he plays the role not simply of a child but of a child who is younger and more inadequate than his child. This occurs, for example, if a boy of eight or ten happens to understand mechanical things better than his father and patiently helps his father to learn the workings of a new machine.

One could probably compile a huge list of activities in which a kind of peer relationship can be established and in which young people can get a taste through association with their elders of some essential experiences which ordinarily they find through association with peers. In other words, although a child's association with adults is not a full substitute for association with age mates, relationships with people of his own age are not completely indispensable for all purposes.

In many communities it seems that it is easier for parents than for teachers to find areas of experience which they can share with their children on a basis of some degree of equality. In many schools, the range of activities in which the teacher and the children share is very narrow. Apart from the hindrance imposed by the strictly academic approach which haunts many schools the teacher is also under the added handicap of having to maintain, as far as possible, friendly and untroubled relationships with a large number of children differing in sex, interests, and ability patterns. Moreover, the teacher

has to be careful not to arouse jealousy and grievances which might occur if she finds a basis of companionship with some children but not with others.

But in the school, as in the home, it is possible to break down some of the barriers between the adult and the child and to find a common ground of equality. It is possible both at home and at school for adults to share many experiences on an emotional level, even though there is a difference between the adult and the child insofar as physical or intellectual capacity is concerned. The more fully the adult is able to appreciate and to accept himself, which means acceptance of his own childhood, the more he will have in common with his child. The less of a stuffed shirt an adult is and the more "natural" he is, as an adult, in the sense of being genuine, spontaneous, and free to expose his humanity, the more he can find in common with children and the more children can find in common with him.

Such an adult need not go out of his way to find common ground with young people for he already dwells on common ground with them, especially in the sphere of feeling. People who differ greatly in age may be quite similar when viewed from the standpoint of their experiences of anger, fear, love, grief, loneliness, need for companionship, need for acceptance, need for independence, and other continuing needs of life. If an adult can be accepting of himself, for example, as a person who now sometimes is anxious and one who as a child sometimes was deeply afraid, he can appreciate more fully the experiences of a child of six or eight or eighteen who is afraid to trust himself in a new situation or who fears rejection and rebuke from his peers. Similarly, the more the adult is able to appreciate and to accept the implications of the struggle for independence which he has gone through, the more he will be able to appreciate the child's struggle. It is possible to expand this line of thought into many dimensions and experiences of everyday life. The main point is that the more an adult understands his own concerns and faces them, the more he can draw upon a common fund of humanity which all creatures share, whether they are young or old.

In the day-to-day relationships between children and their elders

there are innumerable occasions when the young and the old can communicate their understanding of each other. For example, it is possible for a parent who perceives that his child is angry or anxious in connection with an issue that has arisen in his everyday life to let the child know that he appreciates the struggle in which he is involved. He can do this by means of a glance, or by noticeably keeping his mouth shut. He can do it by a kind of understanding patience which allows the child to express his annoyance (even though to a neighbor it seems far out of proportion) or to voice his grievances (even though those against whom the child complains may have an even greater cause for feeling abused).

Through such communications an adult can do much in helping the child to achieve what normally the child struggles to achieve through his peer relationships. And although adults cannot serve as substitutes for peers there are occasions when they can do things in connection with peer relationships that many of the children's own peers are not able to do. For example, a bit of encouragement from an understanding adult may have a decisive influence in a child's struggle with the problem as to whether he should surrender his own interests by conforming to questionable values held by members of his group. In a certain community, for example, a few powerful leaders (and others who are quick to follow) may decide that the right or acceptable thing is to make trouble at school rather than to do serious work, or to go out only for sports, or to persecute members of a minority group, and so on. In such an instance one understanding parent, by joining the child not as a moral censor but as a colleague in a significant struggle, may serve the child better as a peer than a hundred other children might.

The kind of communication which is here being discussed is not necessarily communication carried on by so many words. Indeed, often the deepest kind of communication between an adult and a child takes place by means of silence. The more of a basis of understanding there is, the less need be said. This principle is one which the child may carry over into his adult life, to be used sometimes in his relations with other adults.

CHAPTER EIGHT

Development of Social Behavior (II)

This chapter continues the treatment of children's social relationships and the bearing of the child's social experiences on his way of life and personal development. Among the topics here treated are children's friendships, social acceptance, the developmental implications of the child's social life at school, boy-girl relationships, the influence of socioeconomic status, and prejudice.

Children's Friendships

From the time when a child actively begins to notice and play with others he also begins to show preferences among playmates. When first he begins to play with his peers a child is likely to limit much of his activity to a small number even if there are many in the group. As children move into the early elementary school grades this tendency continues, but one mark of increased social maturity is the ability to enter into working relationships with a larger number of youngsters, and with this goes wider possibilities both for being accepted or rejected as a companion.

A child's social status in a group, as shown by the extent to which he is chosen, sought out, or ignored when youngsters express their preferences, can be measured quite early in the elementary school period, and after members of a group have become acquainted a given child is likely to maintain about the same status from year to year. In other words, the characteristics in a child which others judge and the standards according to which judgments are made seem to remain quite consistent.

Before the age of two, a child is likely, if there is occasion, to begin

to show that he has preferences among the children whom he meets and plays with, and by the age of three or four years strong attachments between two children may occur.[1] Such attachments may last only a few days or weeks, but sometimes they persist over a period of months and even years, even though in the meantime each child has become acquainted with many others.

Companionships between children as young as three may become so engrossing as to limit a child's sphere of activities, as when the dominant member pre-empts all of a companion's time and attention and prevents him from widening his social contacts.

Even at the nursery-school age two or more children may establish a little fraternity among themselves from which others are excluded (Beaver, 1929). In such friendships as well as in less closely knit companionships, it has been observed that one member sometimes dominates the relationship but sometimes one child takes the lead in certain situations and another child dominates in other situations.

Friendships among young children are influenced by such factors as similarity in age, intelligence, sociability, similarity of interest, resemblance to a previous companion or a sibling, and resourcefulness in enlisting cooperation. But each friendship has peculiar characteristics of its own. Frequently when a child first comes into a group, he will attach himself to another youngster who shows himself to be friendly and helpful. As the new child begins to find his way around and feels more sure of himself, he may break away and seek other friends. Sometimes children in a nursery school try to win the loyalty of a newcomer or of a timid child, by such techniques as hovering near the child, smiling, patting, giving invitations, and suggestions as to games that might be undertaken. As noted elsewhere, the efforts of a child to hold a companion who is trying to break away may produce many struggles.

Among young children, one can frequently observe a child who seems to have no particular friends. Such a child may be one whose behavior is of the type that makes others reject him; he may be one

[1] For discussions of friendships between young children, see Challman (1932), Fite (1940), Green (1933b), Hagman (1933), Koch (1944), Lippitt (1941), and Laughlin (1953).

who is ill at ease with other children and seeks rather to associate with adults; or he may be a child who seems interested for the time being in following his own solitary pursuits.

One such rather solitary child, who was observed in one study, was unusually precocious in his language development; he used words that other children could not understand, and, when he approached them, they did not actively rebuff him but merely gave him an uncomprehending look and went on with their own affairs.

Sometimes, of course, a child is friendless because he has characteristics other children find unpleasant. An example of this was a boy who spent two years in a nursery school but never, as far as could be ascertained, was warmly received by any other member of the group. This boy had a habit of poking about, edging up now to one group, now to another, and always letting his presence be known by asking, in a somewhat whining tone, such questions as: "What's that you are making?" "Why do you do that?" "What's that for?"

Factors in Friendship and Choices of Companions Among Older Children

As a child grows older, his choice of friends and close associates naturally must depend upon who is available. When children name their friends, the persons they name are likely to be children who live near them, who use the same playground, who attend the same school and the same class (Potashin, 1946; Seagoe, 1933). This same factor operates, of course, to a large degree in determining friendships among adults. Nearness in space, or propinquity, as it is called, is not entirely a chance factor, in the case of adults, for such matters as similarity in education, economic status, profession, and group loyalties carry weight in deciding where an adult resides and what sort of people his neighbors will be. But even so, adults usually have more freedom to cover a large geographical area in their choice of friends than children do. This factor of propinquity is of greatest importance when the children are young and are not free to cover distance with bicycles or on the bus or train. But even when children approach and enter the teens they are tied to a considerable degree

to companions who live quite near them: In the stretch of time between school and supper, or between supper and bedtime there may, for example, be almost daily opportunities to visit with other youngsters, but quick visits are not easy to manage with children living over a mile or two away. So if children, because of where their family has chosen to live, are stuck with older or younger playmates whom they would not prefer or with rather uncongenial playmates whom they definitely do not prefer they have to make the most of it.

Apart from this factor of nearness, children are more likely to choose as friends those who are similar to them in various characteristics—such as intelligence, height, and age—than children who are dissimilar. But, although general similarities may be found when the average scores of friends are compared, close friends are likely to differ considerably with respect to any of these characteristics. Differences which enable friends to complement one another or which enable one to occupy an ascendant or nonascendant role play an important part.[2] As will also be noted later, children of elementary-school age are likely to name as their best friends children of the same sex; and also as they grow older there is likely to be an increase in the stability of friendships (Horrocks and Buker, 1951).

The feelings and motives that come into play in associations between children vary greatly in quality and intensity. Two children may be companions largely because it is convenient; two others may be companions through fervent choice. The child with whom a youngster associates in his immediate community may be less favored than the one whom he seeks out as a companion at school. A child who fails to win the friendship of his own age or grade group is likely to seek the companionship of someone outside this group. Thus a dull boy may make friends with a smaller, younger child, or, if he is good at boyish things outside the classroom he may have a friend in a higher grade. A girl who is rejected by her own classmates may try to join in the play of the boys and go to great lengths to win their attention and good will.

The child's role and his prestige also may vary from one group

[2] A study by Neugarten (1946) shows parallels between friendship and socio-economic status.

or companionship to another. A child of eight years may be the most respected member of a group of children of about his own age but he may be the tolerated and not particularly welcome follower when he joins the playmates of his older brother. On the other hand, a child may be warmly accepted by youngsters many years his senior because he is such a cute little child, but those same cute ways may not make him attractive to children of his own age.

Social Acceptance

To understand a child it is important to know how he rates with other children, and why. Usually a teacher is in a better position to get this information than is the parent. It is often very difficult for a parent to get a chance to learn how his child is regarded by others. But sometimes both the teacher and the parent have a mistaken impression of how well a youngster is accepted by others.

In a group situation, such as is found in the school or in a camp or recreation center, an observant adult can gain much information concerning children's relationships simply by watching them.

Among the more systematic methods that can be used to study children's acceptance of one another are "sociometric techniques." [8] These are relatively simple, and in many situations it is possible to apply them to obtain information that an investigator might put to practical use. In school, children might be asked, for example, to name one or two or three pupils whom they would like most to have as seat mates or neighbors. In institutions where children spend all their time sociometric techniques have been used to find out whom the inmates would prefer as table mates or as cottage mates, and the like. It is possible also to ask a variety of other questions, such as whom the youngster wishes to play with, go to a picnic with, or whom he would prefer to have as his best friend.

It is also possible to get negative information by asking youngsters

[8] Research in this area received a great impetus from studies published in 1934 by Moreno. A study by Cunningham in collaboration with a number of classroom teachers (1951) gives revealing findings obtained when teachers used sociometric techniques in connection with their efforts to understand their pupils.

FIGURE 3

DISTRIBUTION OF CHOICES AND REJECTIONS AMONG BOYS—MADE BY FOURTEEN BOYS IN A FOURTH-GRADE CLASS

Name and Number	*Sex*	*Age*	*Chooses*	*Chosen by:*	*Rejects*	*Rejected by:*	*Mutual Choices*	*M R**	*C–R†*	*R–C‡*
1. Don	B	10	2, 12, 8	—	4	5	—	———	———	———
2. Duval	B	9	5, 6, 8, 12, 13	1, 3, 5, 6, 8, 12	—	—	5, 6, 8, 12	———	———	———
3. Henry	B	10	2, 8, 12	2, 5	10	—	—	———	———	———
4. Harper	B	9	—	—	—	1, 6, 7, 8, 10	—	———	———	———
5. James	B	10	2, 3, 11, 12	2, 11	1, 7	—	2, 11	———	———	———
6. Jasper	B	9	2, 8, 13	2, 11, 12	4	—	2	———	———	———
7. Jacob	B	9	10, 11	11	4	5, 9	11	———	———	———
8. Luke	B	8	2	1, 2, 3, 6	4	—	2	———	———	———
9. Matthew	B	9	14	11	7	—	—	———	———	———
10. Porter	B	9	12	7, 11	4	3	—	———	———	———
11. Philip	B	9	5, 6, 7, 9, 10	5, 7	12	—	5, 7	———	———	———
12. Ramos	B	9	2, 6, 13	1, 2, 3, 5, 10	—	11	2	———	———	———
13. Tom§	B	—	—	2, 6, 12	—	—	—	———	———	———
14. Fritz§	B	—	—	9	—	11	—	———	———	———

* M R—Mutual rejections. No items here. † C–R—Choice-rejection. In this group there was no instance of a child choosing another who actively rejected him. ‡ R–C—Rejection-choice. No instance in this group of the reverse of C–R. § Absent but either chosen or rejected.

to name persons whom they would not especially care to have as friends, or as seat mates, or as study companions, and so on. This negative approach has not been used as commonly as the positive approach, since information of this sort may be less reliable and, there are children who are embarrassed and reluctant to speak unfavorably about others. Some negative information can be inferred from the positive approach. For example, if a child is not named by anyone when children choose their seat mates, it is quite evident that he is not especially popular. It does not follow, however, that he is actively disliked, for the fact that he is not mentioned may mean that he is just being ignored.

An example of results obtained by means of a sociometric method applied in a fourth-grade group is shown in Figures 3 and 4. The children were asked to name the person or persons in their class whom they would like best to have as a friend. They were also asked to name the person or persons in the class whom they did not especially care to be friends with. Figure 4 presents what is known as a sociogram. The illustration shows only the positive responses represented in Figure 3.

The information so obtained may be used to answer a variety of questions, such as: Who is chosen most? Who is chosen least? or, Not at all? Who is chosen by whom, but does not reciprocate? To what extent are choices associated with certain factors, such as age, sex, socioeconomic status, nationality, and race? Some of the findings obtained by means of this technique may simply confirm what a person already has discovered by observing the group; but the findings may also yield important new information, and sometimes the findings with respect to individual children may be quite surprising. The information that is gained may also have many practical implications (see, e.g., Jennings, 1948a, 1948b, 1950a, 1950b).

In one study, Kerstetter and Sargent (1940), for example, use of the sociometric technique in a fifth-grade class revealed that there was an isolated clique of five boys, and further observation showed that as time passed there was a greater and greater cleavage between these boys and the rest of the group. On the basis of this information

it was possible to take steps to overcome this isolation and to improve the attitudes of the five boys by such methods as new seating arrangements, assignment of the five children to various small study groups, coupled with other efforts to understand the boys and to gain their

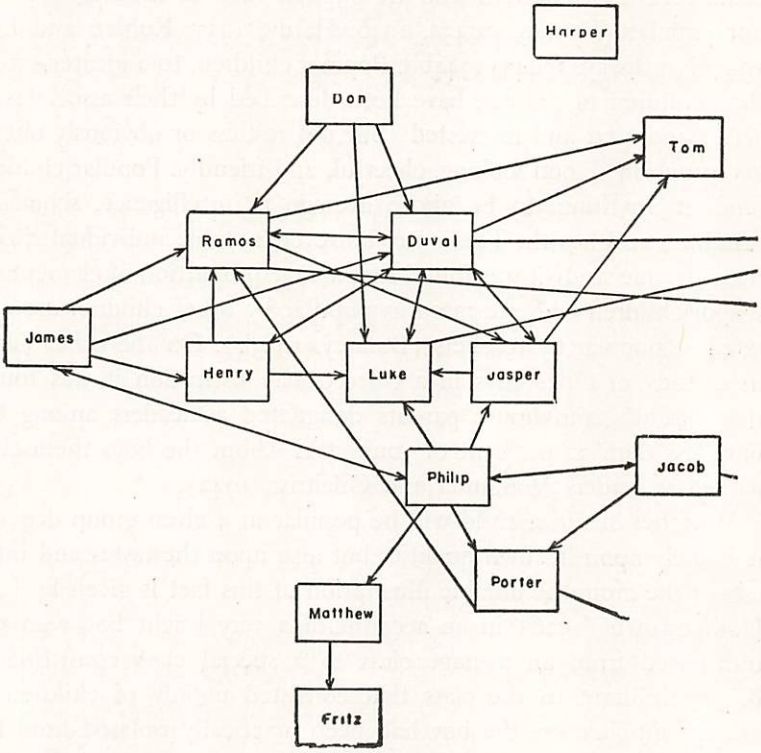

FIG. 4. Sociogram showing choices (but not rejections) by boys represented in Figure 3.

cooperation. In another study, the sociometric techniques were used in conjunction with other methods to study the social and emotional adjustments of children who were repeating a grade in school (Sandin, 1944). The findings showed that the nonpromoted pupils were seldom chosen by regularly promoted pupils and that the nonpro-

moted children, more often than their classmates, named children in higher grades when they named their choice of friends.[4]

Factors associated with popularity. The factors that make a child appealing in the eyes of one or more of his fellows are numerous, but certain qualities have been found in several studies to be more characteristic of children who are popular than of children who are not popular (Bonney, 1943a, 1946; Hardy, 1937; Kuhlen and Lee, 1943; Northway, 1944a, 1944b). Popular children, to a greater extent than children in general, have been described by their associates as active and alert and interested (but not restless or obviously out to get attention), good looking, cheerful, and friendly. Popular children tend, if anything, to be above average in intelligence, scholastic standing, and health. There are, however, notable individual exceptions. In one study it was found that a large proportion of elementary-school children who are rated as popular by other children are also rated as popular by teachers (Bonney, 1943b). On the other hand, in a study of older boys in a correctional institution it was found that teachers and house parents designated as leaders among the boys less than 50 per cent of youngsters whom the boys themselves named as leaders (Fauquier and Gilchrist, 1942).

Whether or not a child will be popular in a given group depends not solely upon his own qualities but also upon the tastes and interests of the group. A notable illustration of this fact is given by L. S. Hollingworth (1926) in an account of a very bright boy who was transferred from an average class to a special class consisting of bright children. In the class that consisted mainly of children of average intelligence, the boy had been practically isolated from the social life of the group, but in the special class the other bright children noticed and warmly appreciated his unusual abilities.

The factors associated with unpopularity are quite varied. In a study by Northway (1944a, 1944b) it was found that among the children who stood low in popularity there were some who seemed to have no apparent interest in the general environment, there

[4] A study by Laughlin (1953) combines various personality ratings with sociometric ratings in a study of groups of children in the sixth grade and again after they had moved on to the seventh grade.

were some who seemed to lack interest in other persons and who tended to be quiet and shy, and there were some who were "socially ineffective," tending to be noisy, rebellious, and boastful. Laughlin (1953) found that children who stood low in popularity received somewhat higher ratings than other youngsters in restlessness and attention-seeking behavior.

Descriptions of characteristics such as the foregoing do not give the full flavor of the variety of qualities that make a child popular or unpopular with his group. Although qualities in a child that appeal to others may vary as he grows older, it appears that popularity tends to be persistent. The child who is popular at one age level is more likely than not to continue to be popular as he grows older. In studies by Bonney (1943b, 1943c) of groups of children over a period of three years, it was found that children's "social acceptance" score remained almost as constant from year to year as did their scores on intelligence tests and on academic achievement tests. This constancy, as measured by the correlation between "social acceptance" scores one year and the next, was notably marked (with a correlation of .90) in one group in which the membership remained much the same from year to year. But children also show a strong tendency to maintain their position of popularity when there is a large turnover in the membership of the group to which they belong. In a study in which children were rated while in the sixth grade and again after they had moved on to the seventh grade in junior high school (with considerable shuffling of the population) it was found that there was a much higher tendency for the youngsters to maintain their position than to shift (Laughlin, 1953). It would require further study of such groups to determine the extent to which popularity at the junior high level carries over to the high school and from there to college.[5] At the junior high-school level, children in groups who stayed together with the same teacher from grade 7 to 8 and from 8 to 9 showed practically as high a degree of consistency in social acceptance as was found in Laughlin's study of children in grades 6 and 7 (Riley, 1953). (The correlations between the rank order

[5] Studies of constancy and change in social acceptance at the high-school level have been made by Tryon (1939) and Kuhlen and Lee (1943).

positions of the children ranged from .48 to .78 with a median coefficient of .64.) At the college level Horrocks and Wear (1953) found that when groups are reconstituted, with considerable change in membership, there might be a rather low relationship between votes individuals receive at one time and those received at a later time after shifts in membership have taken place. These investigators found that individuals who were highly acceptable in one situation might not be so in another.

Many interesting findings concerning the structure of peer groups have emerged from studies by means of sociometric methods undertaken by Cunningham (1951) in collaboration with a number of classroom teachers. The fact that classroom groups have "form and structure" was indicated both by observation and by the use of sociometric techniques. But classroom groups differed in the strength of their social organization, and girls tended to show clearer and stronger social structures than boys.

In all groups some children stood out as being acceptable to their peers, but in the Cunningham studies there was *no group in which a child was totally rejected by everyone else*. This is a very poignant and moving observation. Undoubtedly if one sought widely enough one could find many exceptions to this, for there probably are groups here and there in which some children are rejected by everyone. But there is something very hopeful in the fact that in many groups where status positions are marked and where children strongly prefer some of their peers and strongly ignore or dislike others it still is hard to find a single child so mean, so despised, so rejected that no one can find anything worthy in him.

Another interesting finding in studies using the sociometric technique has been that while there generally are children who are chosen by many others, no child is likely to be named as the first choice of all members of the group. No one, in other words, has a corner on the market of social acceptability.

In the Cunningham studies it was also found that the degree to which a child accepts others varies as widely as the degree to which others accept him, but the two factors are not tied closely to one another: A child who accepts many may be accepted by many or by

few; the child who is accepted by many may show an accepting attitude toward many or few.

It was found that there was relatively little correlation between acceptance and such factors as chronological age, intelligence quotient, or socioeconomic status. In the Laughlin study (1953) it was also found that the correlation between intelligence and acceptances as measured by sociometric tests was relatively low.[6] However, there might be little statistical correlation between these factors when results for a large group are examined, and yet it might be found that high intelligence (or low intelligence) is an important factor in determining the choices of individual children or even of subgroups.[7]

The preferences and affinities children reveal in their relationships with one another show that the factor of IQ has less weight when school children are appraised by each other than when they are appraised by the school. When children bring home from school report cards of a sort still widely in use, most of the entries are in terms of academic skills, and these skills have a rather high correlation with intelligence. Even when children are rated in nonintellectual skills the ratings in such skills may be contaminated by the poor reputation the child already has won because of a low academic achievement.[8] But if a child were to bring a report card which shows what he thinks of others as fellow human beings, it would often be quite different from the one the teacher prepares on the basis of classroom achievement.

We might ask, "Which of these reports would give a truer and more realistic picture of the child?" We obviously cannot answer, for the teacher in the conventional school rates the child according to one set of values (values which people in "higher learning" im-

[6] At the adolescent level H. E. Jones (1949) also found that there was little correlation between intelligence test scores and popularity.

[7] For example, two left-over boys in a fifth grade, who have relatively low IQ's and who were not promoted with their group to the sixth grade, might choose each other, but the effect of such a choice by two members would not make a large showing in the results when data are computed for a class of forty.

[8] For example, a boy with a rather mediocre record in academic subjects came home one quarter after the next with a very low mark in music, even though all would agree that he was exceptionally able in music. It was apparent that the teacher was not evaluating his music but was expressing, in giving him a mark in music, a bias she had against him.

posed on the elementary school many generations ago), and the children rate one another in terms of another set of values. To some extent the two measuring rods test overlapping characteristics, it is true. In most large schools there probably are some children who rate low both in academic work and in social acceptance. A child who is doing poorly in school work and who is being reminded of failure by his teacher, may, for example, become so harassed, "nervous," and jittery that his restlessness is annoying to his schoolmates and he suffers in their estimation. Again, a child who is doing poorly in academic work may use every possible excuse for staying home from school, which means that he would have less association with his classmates. Subsequently, he might have less chance to be named when the youngsters make their choices on a sociometric test. Moreover, a child's social relations may also be so disturbed that he becomes emotionally upset in a manner that interferes with his academic work. So in one way or another, ratings in academic achievement and ratings of social acceptance by peers are likely to be influenced by common factors. Yet, the two ratings seem to retain a great amount of independence and distinctness in spite of this.

The fact that ratings on an intellectual basis and on the basis of social competence may be distinct to a large degree is shown in other ways. It is generally not found, for example, that there is a close correlation between vocational success and intelligence or academic achievement among people who have the minimum amount of ability necessary to get into the vocation but who still differ widely in ability. The most successful doctor, lawyer, military leader, or teacher may have had a high academic rank or he may have been average in the usual tests of academic ability. One reason, among others, why the correlation between "success" in life and academic achievement is far from perfect is that qualities other than intellectual ability are important in determining success, and these qualities include the "social" qualities that enable a person to get along with others. This is a rather obvious consideration, yet it is one of the simple truths that often is overlooked or violated in dealings with children.

The qualities which are involved in the child's day-to-day relationships with his peers, and which influence the extent to which and the

ways in which he is being accepted by others, are of vast importance. Yet millions of children in thousands of communities are being evaluated and are having official stamps of failure and success, approval and disapproval, worthiness and unworthiness placed upon them day by day and year after year in schools which use intellectual achievement either as the only or the primary value and yardstick by which children are judged.

If we argued that it is proper for the school to evaluate children primarily on intellectual grounds, two considerations still remain: First, an evaluation on intellectual grounds has limited value, even within its own sphere, unless some attention is paid to nonintellectual factors. Second, there is no institution in our society other than the school that is in a position on a wholesale basis to take responsibility in connection with the social development of children, and this responsibility is side-stepped when schools subordinate social to academic development.

The high saturation of much of our child-rearing machinery with the concept of intellectual superiority as the primary measure of a child's worth represents to a large degree a distortion of values. High intelligence and intellectual achievement of the kind now so greatly prized in most schools neither guarantee a higher quality of personal adjustment nor a superior kind of relationship with others. When we consider the child's development as a whole, and view the total gestalt of psychological forces that come into play in a human being's relationships with himself and in his relationships with others, it seems (in the writer's opinion) that the emphasis that so often has been placed on the segments of intellectual achievement measured by the "standard" intelligence and achievement tests is an overemphasis.

Factors Associated with Consistency and Change in Social Relationships

The fact that children tend to maintain a more or less consistent status within their social group during the elementary school period may be due to many circumstances. The most obvious interpretation

is that a child who has the qualities and characteristics that make him liked or disliked by his classmates one year is likely to keep on possessing these qualities from year to year. Children like him because he is, as they see it, a likable person, and he is much the same in this regard from year to year unless something quite radical happens in his growth process or in the circumstances of his life to change his attitude. Factors that could make him different might be an illness, moving from a teacher who is helpful to him to one who is hostile (or from one who is hostile to one who is friendly), and so on.[9]

But consistency in the child's character from year to year does not alone explain the fact that his position in the judgment of others remains quite constant. When a child gets similar ratings (even after moving from a familiar set of associates to a new group), we must not only assume that there is something in his make-up that makes him acceptable or objectionable or overlooked by his associates, but we must also assume that there is a high degree of constancy in the values or standards according to which he is judged.

Further, a child may consistently be accepted or rejected from year to year not by reason of his own merits alone but because his reputation follows him. A youngster who, for one reason or another, has received a bad reputation in the elementary grades may still be plagued by it in junior high school, for even though many of the children there are new to him, one first-class gossip from the former grade may be able to stir up doubts and suspicions against him.

Another important consideration is that consistent popularity from year to year is not in itself evidence that a youngster's development is progressing well. When a child is similarly well accepted from year to year it may mean that he is the sort of person whom others admire for his genuine qualities, but it might also mean that he has developed an art of currying favor with others. If such is the case, his continued high standing may not be a sign that he is strong and healthy; it may simply mean that he has become clever in his ability

[9] There also is evidence that a child's reputation with his teachers is likely to show a high degree of constancy from year to year, especially if he is a "problem" (Tucker, 1937).

to conform and to seek approval. Wittenberg and Berg (1952) have pointed out how a youngster can achieve popularity at a great cost by surrendering his personal integrity and playing up to a role imposed by someone else. We must know more about a child than is revealed by a sociometric test in order to tell whether his position is a good one. The test alone does not tell the price he has to pay for being accepted by the group.

A child with strong interests of his own and with a sturdy regard for his own rights may not be as concerneed about the impression he makes on others as would a youngster who has little confidence in himself and whose sense of worth depends on how well he is accepted by others. So if a child with independent interests is relatively low on the scale of acceptance from year to year this may simply mean that he chooses, as time passes, to follow his own bent.

It must be added, moreover, that when a child receives a high or low evaluation from others one year after another, it probably also does something to him whether or not the values of the group are commendable. If he is looked down upon (whether or not deservedly) it will be hard for him to be wholehearted or spontaneous in his relationships with others. Few children are so strong in their own right that they are unaffected by disapproval from the group.

Apart from the question as to why children tend to maintain roughly the same status in their peer groups from year to year, the fact that this occurs is of great practical importance. When it is observed, for example, that children in the first grades in junior high school keep intact, to a large degree, the system of popularity and the social preferences which were apparent in the elementary grades, the implication obviously is that if we are to use this information in a practical way it is best to begin early in the child's school career. What there is to do and what might be done by way of guidance and psychological counseling, group and individual therapy in the later grades will be influenced to a large degree by what has happened in the earlier grades and by attitudes and habits that were established there. So, from this point of view, the younger the child is when we begin to work with him in the interest of helping him toward healthy social development, the better it is. If we had the appropriate knowl-

edge and the means and the good will it probably would be much easier to "help" a child when he is young and still in process of establishing the attitudes toward others and toward himself that come into play in his social relationships.

The implication of findings concerning the social development of children is that if we are going to try to influence this development at all the earlier we can begin the better will be the results. If we could get adequate scientific data we would find that the influence of a good teacher or a good playground director in first grade is at least as important, and probably more important, than what can be done with the same investment of time and attention at the sixth-grade level. It is not unlikely that the higher up we go in age or grade, the smaller will be the relative return from the investment. One moral emerging from this (granting that we assume this situation to be true) is that in education and other institutions designed to promote the development of children we should make the greatest psychological investment at the earliest ages. This would mean, among other things, that a teacher's understanding of self and of others as it pertains to the social and emotional aspects of life should weigh at least as much as the teacher's academic ability.

In the present arrangements in education, the greatest investment (in terms of money) often is made at the later levels: In some school systems it is assumed, for example, that a high-school teacher should be paid more than an elementary school teacher, and an elementary school teacher should be paid more than a kindergarten teacher. And in most communities there is no pay at all, from tax funds, for the nursery-school teacher even though, according to the line of thought here pursued, this teacher probably could be the most important person of all and give the community the highest return on its investment.

The Bearing of Childhood Relations with Peers on Earlier and Later Attitudes Toward Self and Others

Many fascinating questions arise when we ask what might be the implications for later development of findings such as those presented

above. As we have seen, there is a long stretch of years during which many children of elementary and junior high-school age occupy a relatively stable place in the esteem of their peers. What bearing does a child's earlier way of life have upon the extent to which he is accepted by his peers during this period? What bearing does his experience of being accepted or rejected during this time of his life have upon his ideas concerning himself and on his attitudes toward himself and others as he moves on into adolescence and adult life?

Systematic evidence bearing on these questions is relatively limited. Such evidence as there is suggests that, in the population at large, with the passing of the years, there is more likely to be continuity and consistency than inconsistency or a radical shift in attitudes that come into play in a person's relationships with others. But a broad, developmental trend such as this, applying to people at large, does not tell us much concerning the individual whom we seek to understand, be he an adolescent whom we are curious about, or an adult associate whom we should like to fathom, or one's self. But to raise these questions may still be quite meaningful as we view the behavior and attitudes of adults whom we know.

It is noticeable, for example, that some adults seem quite genuinely to take it for granted that their peers will like them and accept them, while some adults almost seem to assume the opposite. Some adults behave as though they constantly must earn or bribe their way into the good graces of others by being especially polite or by persistently carrying more than an equal share of the work and expense involved in social activities. It is not unlikely that such attitudes are related to experiences with peers during middle childhood and with adults during earlier childhood.

It may also be noted that the extent to which an adult appears confident of being accepted by others does not seem to be tied to his ability or a desire to be singled out for special honor and fame. Instead, it sometimes seems that those who most eagerly seek to win an especially prominent place are those who are least confident of being accepted by others: It is as though an impersonal sort of public acclaim were needed to compensate for the lack of more intimate interpersonal relationships. Many other similar conjectures might be

raised. Actually, the conditions underlying adult peer relationships are more complicated than these conjectures imply, yet it is instructive to raise such questions as we consider how the study of children's social relationships might help to understand the behavior of adults.

Leadership

From the time when children are of nursery-school age a child's leadership of others takes many forms, and his position can be won in a variety of ways. One child may be a leader partly by reason of the fact that he is very voluble and mobile and covers much ground. Another child may take an upper hand by selecting and dominating the play activities of a group by virtue of aggressive methods and various forms of coercion. Still another child may lead because he is resourceful in seeing new and original possibilities and in establishing friendly relations with other children.

Perhaps the most warmly accepted leader is the one who makes it pleasant to be a follower. An example of resourcefulness of this sort follows: Kirk was a child who had a knack for making the other fellow feel important, while he himself was running things. On one occasion, he initiated a make-believe game of running a boat. He approached another child, asked him to be the captain (saying, "The captain is the big boss, you be the captain. I'll be the engineer."), and then, when the "captain" was installed in all his glory on the deck of the boat (a big box), the humble engineer, from below, ran both the captain and the ship.

The apparent differences between children in their ability to exercise leadership may be deceptive. The child who makes quite a splash and who seems to be directing others may actually be having less influence than a child who is mild and quiet in his ways but who suggests ideas which a more aggressive child proceeds to exploit.

The characteristics of the leader among children who are older are likely to vary somewhat with the nature of the situation in which he takes the lead. Athletic leaders, for example, are likely to stand high in physical achievement; leaders in intellectual activities in the classroom are likely to be those who stand high in scholarship.

The leader is likely to be somewhat above the average of his group in intelligence and, as a rule, he is likely to be somewhat larger, better dressed, more fluent of speech, better looking, more self-controlled, and more daring. In a study by Terman (1904) it was found that leaders tended to be conspicuous, even though they might not be conspicuously good; they tended to rate either very high or very low, rather than merely average, in such matters as size, dress, and schoolwork. However, it appears that a child may fail to achieve leadership if he is too far above his associates in ability. In many situations, the leader is one who also can be a good follower when occasion so demands.

In the study by Jennings (1937), sociometric techniques were applied at intervals during a period of two years and seven months to study affinities between members of a group and evidences of leadership. It was observed that in a group structure that already is quite firmly established it is difficult for a child who is on the fringe to enter and participate. Further, leadership appears to be a process of choosing as well as of being chosen—it was observed that incipient leadership was indicated by the fact that children on their way to a leading position would choose individuals who already occupied a position of leadership, even though such choices at first were not welcomed. Children who suddenly moved into a prominent position were more likely just as suddenly to lose their prominence than were the individuals who pushed steadily and gradually to the fore. Once a child had acquired a prominent position through persistent effort he was not easily displaced.

Practical considerations. Although superior ability and skill may not suffice to make a child a leader, yet the fact that the more able are most likely to lead has obvious implications for education. But leadership need not be viewed as an all-or-nothing or absolute matter. When children make their own selections, the choice falls upon different children in different activities and projects. This fact alone allows several children to have an experience of counting for something within the group. Apart from this, it is not so important to see that every child becomes a leader, since this would be nearly impossible; but to see that he is not always at the other end of the pro-

cession, always distinctly in the back seat, always overwhelmed by the prestige and authority of others, and never given a chance to assert himself as an individual should be of paramount concern. The fact that there is a leader at one end does not imply that there must be a browbeaten nonentity at the other.

In connection with most of the informal group activities children undertake, adults are quite content to allow youngsters to work out their own solutions as to who shall be the leaders. But in many groups the leadership situation presents adults with difficult problems. The fact that the child who is the leader has been freely chosen does not necessarily make him the best leader. The group as a whole may have standards which do not help the individual members but get them into trouble, as would be the case when an eight-year-old youngster is thrown in with a group of children who go on window-breaking sprees under the leadership of one of the older more aggressive members. If a child's home is ringed about by such children it will be difficult for him if he stands out against them, and it will be difficult also if he does not. Moreover, the fact that a certain child seems to be the chosen leader of a group does not mean that he was freely chosen. Even within the social enterprises of children as young as six or seven there may be customs and attitudes at work that did not arise spontaneously within the group and that make it easier for one child than for another to gain prestige. At a somewhat later level, children themselves may use techniques for manipulating power, a little after the manner of gangsters among adults, and a child who is caught within such a web of power may be helpless (especially when one of the iron-clad rules of the group is that no one should "squeal" to adults no matter how cruelly he may be treated). In one such situation known to the writer a boy who was trying to prove that he could "take it" was "beaten up" many times by rough schoolmates before his parents discovered what was going on.

There are groups in which unhealthy psychological conditions prevail, just as there are individuals who are unhealthy, and it is no more reasonable to let a child suffer from such conditions on the theory that his social relationships are his own responsibility than it would be to let him depend entirely on his own resources in facing

the dangers of physical disease. For this reason, the concept of "social adjustment" should be applied with considerable care. If a child is not well "adjusted" within his social group it is, of course, a serious matter: He probably is quite unhappy and needs help (unless he is an exceptionally robust character with strong social ties outside his regular peer group). But when a child is not adjusted to his group it does not necessarily mean that there is something wrong in him. The difficulty may be that the ruling members of the group are hostile and anxious people who manage to look well-adjusted but who seek to dominate members of the group in a manner that any self-respecting child would resist.

The Desire to Belong

In time, through a combination of many factors, one of the strongest motives in a child's life is the desire to be accepted, to belong, and, eventually, to achieve some measure of recognition and prestige in his relations with his fellow men. This expresses itself first in a child's desire for security in his relations with his parents. When he moves into a larger world, a similar desire goes with him.

Young children sometimes go to almost any length in order to be noticed. Many children become angrier if they are completely ignored than if they are crossed and punished; but whether their bid for attention takes the form of humility or perversity, or merely follows a middle road, underneath it there is a wish to be noticed and appreciated.

In his home relations, a child has a need for being securely accepted, and his underlying security counts for a good deal more than this or that practice which his parents may use. In his relationships with adults outside the home, the child has a similar need for an emotional anchorage. Adults who are in a position of authority, such as the teacher at school or his playground director, are, to a large degree, reacted to as substitute or temporary parents. However much the child's behavior sometimes may gainsay it, he still greatly desires the approval and affection of these substitute parents. For this reason, the attitude of the teacher toward the child is pro-

foundly important to him even though he tries not to reveal it. It is likely that even the most incorrigible child, who seems to be endowed by the devil himself, would like to be liked by his teacher. In the day-to-day life of the school a teacher who is harassed by many duties and by the "problem" children in her group will find it hard, of course, to realize this simple fact. Moreover, if he is a "spoiled" child from the start and has techniques that rub the teacher the wrong way he may, from the very beginning, get the impression that the teacher is against him. His answer may be more obstinacy and rebelliousness and all manner of behavior that plagues the teacher.

The child who gets a bad start when he begins school often, as noted earlier, acquires a reputation that follows him from class to class and from teacher to teacher. The behavior of such a child may be very irritating and discomforting to the teacher, but the child himself is even more miserable. To break through the crust of hostile attitudes which a child in this plight has acquired is probably the most difficult task that confronts a teacher. To meet this challenge it is necessary for the teacher to have some understanding of the struggle and pain that lie concealed under the impertinence and meanness of a "problem child." It is necessary also that the teacher have enough insight to appreciate the way in which her own feelings may come between her and the pupil. When a child, even though desperately in need of friendliness, is rude and defiant the teacher, like any other human being, is likely to feel hurt, or threatened, or perhaps angered, and it requires insight and compassion to perceive the pathos and the pain which lie hidden beneath the child's nasty ways.

The child's desire for status appears also in his relations with other children, and in order to win a place for himself he will go to great lengths. Behavior that is baffling to adults may be motivated by the child's desire to please his peers or to gain their attention. Most children also learn eagerly to accept the symbols and forms that betoken kinship with the group, such as sharing secrets and confidences, entering into partnerships, or joining clubs and societies which may last for days or years.

The child who is striving to be accepted by others is also sensitive

to rebuff and rejection. His feelings when scorned or ridiculed by his peers may range from grief and despair to intense rage. Children are loathe to express such feelings, and the reasons for them, to adults. It is difficult for a child to admit to himself, or to others, the bitter fact that persons whose good will he desires actually do not like him. He probably will reveal some of his feeling through symptoms such as finding fault, fighting back, complaining, and other responses of the "sour-grapes" variety. But in so doing he is not likely to reveal the true cause of his feelings. Accordingly, his elders may not realize that when he is telling how much he detests certain children he actually may be expressing how much he would like to be liked by these same children, or how deeply he stands in contempt of himself.

The following account shows how one child reacted to rejection by her peers. She was six years old and in the first grade. On two occasions the parents, while driving past the school during recess, happened to notice that the girl stood by herself while the other children were playing. This seemed unusual, for the child was quite gregarious, but they did not realize that there was more to the story. At a later time the girl happened to mention that she had played that day with some "big boys from the third grade." Some days later she again mentioned that she had played with one of the big boys and had pulled his shirttails out of his pants. That evening, as though troubled, the girl asked her mother at bedtime, "Have I been a good girl today?" In answer to this unusual question the mother said yes, and then added rather lightly that she thought it would be better if the girl did not pull shirttails out of boys' pants. At this the child burst into tears. She sobbingly asked, "Then who shall I play with? When I eat lunch I sit alone, and out on the playground the other girls don't play with me." The difficulty, in part, was that most of the other girls in the class had been playmates before coming to school and were playing in a closed group, which this girl, a newcomer, had been unable to enter.

In this case, the child revealed her feelings, but only after she had been troubled for several weeks and after she had become involved in behavior that was disapproved. It was possible now for the parents

to consider whether they should take a hand or let the child try to win her own battle. Two schoolmates of the girl's choosing were invited to the home by the mother and this may or may not have been partly responsible for the fact that the girl began to find her way into the group.

When children have troubles of this sort and do not reveal them, it is difficult, of course, for adults to understand or to try to help. Through lack of understanding the adult may even make things harder for the child. In the instance above, for example, it might have made matters worse if the mother through ignorance of the real state of affairs had scolded the child for rough play with older boys when actually this play, from the child's point of view, was only a poor substitute for play with girls of her own age.

A child's relations with people and what these relations mean to him can be extremely deceptive. The degree to which a child succeeds in winning friends and companionship is not something that can be judged by the number of people that are around or by external appearances.

This difference between outward appearances and the child's point of view is illustrated by a boy who felt out of things and was a lonely child, even though he had a father and a mother, and several brothers and sisters near him in age. His father was preoccupied with his own ambitions and anxieties, and his limited contacts with the boy simply expressed a stern sense of duty. Instead of having companionship by virtue of having many brothers and sisters, he was bereft of companionship for this very reason, for they were competing with him for a small bit of affection that might be had from the busy mother. So this boy fell back upon himself and tried as best he could to find a friend. He constructed a set of imaginary companions. These included a whole family: A father, a mother, and two children. With a kind of lonely courage he endowed this family with the friendliness he could not find in actuality, and he tried to draw from its members the intimacies he could not gain from his kin. He was then about three and a half years old. This arrangement worked for a time, but as he grew older members of his family began to laugh at him, and soon after he was four he

cast these imaginary companions aside. It is well that he did, for the escape he found in them was no solution to his problem, and it was hard to keep up the pretense. He cast these friends aside even though he had found no one to take their place. He remembered them in later years of childhood with a feeling of loss and a sense of shame. It was not until about thirty years later, and only after he had found real persons to take the place of these imaginary companions, that he was able to look back on them with a feeling of compassion.

In the meantime, however, during the years of childhood and youth, he always seemed to have many companions about him—that is, he had plenty of associates. He was, to all appearances, a "socially well-adjusted boy" and a sociable boy, but within his own world he was a solitary creature, seeking and never finding in his relations with other persons the kind of intimacy he had not had in his relations with his parents. And although he was a "socially well-adjusted boy" and never a "problem" but instead a credit to his teachers and his community, he went through his childhood as though he were a stranger. When he was old enough to make his own way in the world he went away from the community in which he was reared and he never returned to it or to his earlier companions except to attend the funerals of family members.

Boy-Girl Relationships

When a child is first old enough to enter into social relations with other children, distinctions between boys and girls are not likely to be very noticeable. Boys and girls play together and enjoy much of the same activities. Even at the preschool level, however, some distinctions and differences appear. Boys tend to be more active in their play, although differences within each sex group are larger than the differences between the two sexes. At the ages of three and four boys enter into a larger number of conflicts than do girls and are more likely to resort to hitting, as noted elsewhere in this book. In a mixed group, boy-boy and girl-girl conflicts are likely to be more frequent than boy-girl conflicts, but there are

large individual differences. At the preschool level, likewise, especially after the age of two years, boy-boy and girl-girl friendships are likely to be more numerous than friendships between a boy and a girl.[10] However, even though children prefer playmates of their own sex, there is a good deal of interplay, and at this early age a child is not likely to be disturbed if he is in a group in which all members are of the opposite sex.

Some Differences Between Boys and Girls

Other differences can also be noted (these are documented in other sections of this book) which might directly or indirectly make a difference in the social habits and behavior of boys and girls. Girls are, if anything, somewhat superior in early language development. They tend from an early age to show more interest than boys in people and in social relationships, while boys tend to show more interest in things and in mechanical contrivances.[11] In many respects, boys are the weaker of the two sexes, at least during the first years of life. Infant mortality among them is somewhat higher, and they are slower in their development as measured by skeletal development. Girls do not exhibit overt behavior problems as often or as much as boys do; fewer girls than boys have noticeable speech defects or reading difficulties. Boys usually far outnumber girls among the "problem" children in school and in the delinquent population outside of school (Ullmann, 1952).

In some respects it seems that in the course of development it is harder to be a boy than to be a girl (although it would be possible also to document the opposite conclusion). The main difference may be, however, that social expectations and pressures are such that boys have more freedom to show their feelings, to rebel openly, and to exhibit their frustrations and anxieties in overt ways.

[10] See Challman (1932) and Hagman (1933).

[11] For a survey of other differences between the sexes see Anastasi and Foley (1949).

Sex Stereotypes

Boys and girls from a very early age come under influences that have the effect of nudging them or forcing them into living up to the sex role of the boy and of the girl. Early in life they begin to hear what a "real" boy or a "real" girl would or should do. They are dressed differently, receive different toys, and different instructions as to what is "nice" and what is forbidden. From an early age many boys learn that they can expect more freedom in hitting, swearing, spitting, roughhousing, getting their clothes dirty, exposing their bodies, fighting, and roaming about the community than is allowed to girls. Also, in many communities, children from an early age begin to experience, directly and indirectly, differences in freedom and moral censorship that are applied to males and females in the sphere of sex.

In many families fathers and mothers become anxious about possible sex behavior in their daughters, at quite an early age, which does not concern them so much in their sons. In some communities the so-called "double standard" is widely prevalent at least in theory, and although sex irregularities may not be openly condoned either in boys or in girls the practical situation is that boys are permitted, so to speak, to be far more free than girls to make sexual advances and to engage in various sexual activities. This has the effect of allowing boys to be rather predatory while girls are supposed to be cautious and chaste and to assume more responsibility for proper conduct in the sphere of sex.

It is doubtful, however, whether this "freedom" bestows any benefit on boys, for the more freedom in the sphere of sex they allow themselves the more the girls (and especially the parents of the girls) tend to be on guard. Moreover, even when there is an appearance of sexual freedom for boys, there may be severe inconsistencies and conflicts surrounding it. For example, boys who are aggressive in their overt sex behavior in the alleys or behind the barn may blush to the roots of their hair when four-letter words

pertaining to sex are mentioned in their hearing in mixed company, showing that they are far from serene or conscience-free in their attitudes toward sex. Again, the very language used in connection with sex often (perhaps we may say nearly always) has a derogatory connotation, as though there were something filthy about it. When a child uses a sex term as an expression of hatred and contempt for others the term probably has some of the same meaning when he faces its meaning for him. The language of contempt for others is also the language of self-contempt. Moreover it is unlikely that a boy brought up in such a society as ours can freely exploit his sexual desires by taking advantage of girls (especially in ways that his parents would not allow in relations of other boys with his own sisters), without having some conflict in the matter.

The greater "freedom" which boys are allowed in the sphere of sex and in other spheres (such as fighting and other expressions of hostility) may to a large extent be an illusion. If along with a greater appearance of outward freedom there still is a tendency toward self-blame, then the outer freedom merely invites trouble. To the extent that moral codes, in their practical interpretation, but not in their personal implications, make it easier for a boy to exploit his desires and to express his resentments, such codes make it harder rather than easier to be a boy. Stated more figuratively, greater freedom to sin, without greater freedom from scruples aroused by sin, is not a very beneficial kind of freedom.

Another point may be added. Up to the time of adolescence, women are the child's moral guides to a greater extent probably than men are, and even if his female preceptors allow a boy a little more practical leeway it is questionable whether they actually allow him a corresponding amount of moral leeway.

So, the male child, while allowed more freedom in some ways, does not have the immunity that should go with freedom if it were complete, and he may have more on his conscience.

There is another feature which perhaps adds to the burden of being a boy. The stereotype or conventional picture of a male that is placed before a boy represents a figure who is robust and strong, able to "take it," less inclined to weep than a female, less senti-

mental, more "practical," less capable of tenderness, more richly endowed with that noble quality which makes it possible (and mandatory) for a *real* man to allow women and children to escape first in time of danger. A manly figure according to this stereotype is one who can grin like a fool even though his heart is broken. Probably this stereotype is one of the most false of all social stereotypes. There is no good reason to believe that boys are more robust emotionally, less moved by fear, stronger in the face of danger, less capable of tenderness, more inclined than girls to be ruled by reason instead of sentiment. But to the extent that a boy is directly or subtly under pressure to live up to a false picture of masculine strength he is likely to get into situations of conflict within himself, for he will be measuring himself against an irrational image and an impossible standard.

Social Distance Between the Sexes

"Social distance" between the sexes which can be noted as early as the age of two or three becomes more conspicuous at the elementary-school level. Social distance between the sexes was studied by Koch (1944) in an investigation that included children from nursery school to high school. One of the methods employed was to have a pupil name his preference when each child in his class was paired with each of the others. At the preschool, elementary-school, and even at the high-school level boys showed a higher preference for boys and girls for girls. This preference for members of the same sex increased up to high-school level and then decreased. The tendency to cleave to one's own sex was shown more pronouncedly at the elementary-school level by the girls than by the boys. However, this was reversed at the high-school level where boys showed a higher preference for boys than girls for girls.

Other changes associated with age in the social-sex relations of children have been reported (Campbell, 1939). In the age range from five to eight years, it was found that the average boy would play contentedly when he found himself in a group composed entirely of girls; that he was not likely to show protective habits

toward girls; that he was not self-conscious with regard to posture, gesture, and clothing in the presence of girls, or with regard to physical contacts with them; that he was not concerned with girls as attractive creatures and would fight them or would choose one for his "side" if the game did not involve physical skill. In general, he preferred women to girls, especially women who would play with him.

A greater tendency for boys to prefer boys on their "side" was shown after the age of nine. At this time also, boys showed more self-consciousness with respect to physical contacts and to being alone in a group of girls.

The youngest girls likewise showed little embarrassment about posture, clothes, physical contacts, or being alone with a group of boys. At age eight and onward, more self-consciousness appeared; there was a greater tendency to avoid groups consisting entirely of boys and to avoid physical contacts, and there was more awareness of games that are "boy" games and "girl" games. In approaching the teens, the girls exhibited a "whispering period"; they became more "modest" and conscious about their clothes and about exposing their bodies. With the development of adolescent interests boys and girls changed their earlier tendency to draw apart and paid increasing attention to one another. In this study as in several others it was found that boys tend to lag somewhat behind girls in certain manifestations of heterosexual interests. It was also noted, among other things, that whereas boys as they grew older seemed to lose interest in displays of adult affection, a similar loss of interest was not shown by the girls.

The cleavage between the sexes can be observed in almost any situation where boys and girls gather together for free, unsupervised play. However, it can also be observed that under the leadership of an adult girls and boys enjoy many activities in common, even though, when left to themselves, they tend to segregate. Moreover, in a given neighborhood there may be a great amount of interplay between boys and girls who, when gathered in larger groups, as on the school playground, play only with members of their

own sex. In other words, children do not invariably prefer members of their own sex.

There are from an early age certain differences in the interests of boys and girls which lead a child to seek out members of his own sex, but whether and to what extent factors inherent in children themselves tend to produce such differences as the above would be difficult to determine. It is easy to see that these differences, whatever may be their origin, can be prompted and encouraged by the culture in which a child lives. By the same token the social cleavage between the sexes during elementary-school years probably is due to a large degree to cultural pressures, rather than to factors inherent in the children themselves.

The Impact of Adult Social Stratification on the Child

Sooner or later the child's social behavior will be influenced by the fact that people in the adult society in which he lives differ in social rank, position, or prestige.[12] Labels, such as "upper," "middle," and "lower" class, have been used to denote differences and distinctions. There are objections, however, to the use of the term "class," since the term suggests a rather rigid form of stratification. Actually, a person with certain qualities and characteristics might belong to the "upper crust" of society in one community, but a person with similar qualities might stand several rungs lower on the social ladder in another community that has different standards as to what constitutes wealth, or good family connections, or superior manners and breeding, and so on. However this may be, it is apparent that in most communities, if not in all, there will be

[12] For illustrative discussions of status or rank systems see Warner and Lunt (1942), West (1945), Davis (1944), Dollard (1939), and Warner, Havighurst, and Loeb (1944), Hollingshead (1949), and Stendler (1949a). Warner and his associates distinguished not simply the conventional "upper," "middle," and "lower" groups, but within each of these groups they made a further distinction between an "upper" and "lower" subgroup, yielding six groups in all: "Upper-upper," "lower-upper," "upper-middle," "lower-middle," "upper-lower," "lower-lower."

differences in rank and position of individual members, whether or not these fall into clearly defined "classes." Such differences will weigh most with those who evaluate others in terms of the external marks of conformity and conventionality rather than in terms of individual merit.

The manners, customs, and privileges of the social group to which a child's family belongs will have a bearing on his everyday life at an early age. Different social groups sometimes have differing practices, for example, with reference to breast feeding or bottle feeding, time of weaning, time when training in bladder control is begun. Again, the family's socioeconomic status will make a difference in the amount of play space a child has or determine whether he will have to share a room with others.[13]

Partly by virtue of the fact that families in the "lower" groups have tended to be larger, with less adult attention available per child, children may have taken practical responsibilities for their own care and safety to a greater extent and at an earlier age than children in higher socioeconomic groups. So, too, parents in higher socioeconomic groups may be more on the alert than parents in the "lower" groups to discourage fighting and aggressiveness and "bad" language. Indeed, in certain "lower" groups a child may be encouraged to be a fighter, although subject to certain rules (Davis, 1944). Again, there are status-related differences with respect to other manners, etiquette, sex behavior, attitudes toward property, and the like. These do not, of course, necessarily take the form of greater modesty or more rigorous standards in the "upper" groups. It is interesting however to observe that in the Kinsey study of the sexual habits of American males (1948) sex habits were in some respects more closely tied to socioeconomic status (in this study, highest level completed in school) than to religion or geographical location.

There also are factors related to social position that might in a very subtle way affect a child's evaluation of himself, his confidence in facing new or different social situations, or his assurance or lack

[13] A study by J. E. Anderson (1936b) shows a great range of practical ramifications associated with differences in socioeconomic status.

of assurance as to whether other people are likely to receive him well. However, an environment that is less privileged may also be less demanding, with the result that the child may be spared some tensions that befall more affluent youngsters. In a brief review of a series of studies on the subject of social class, Havighurst (1946a) reports that in one community it was found that middle-class parents were more rigorous than lower-class parents in their training of children for feeding and cleanliness habits. They also expected children to take responsibility for themselves in these matters earlier than did lower-class parents. Also, according to this study, middle-class parents in the groups that were studied placed their children under a stricter regime, with more frustration of their impulses. In passing it is interesting to note that the same types of differences were found to exist between middle- and lower-class Negroes and between middle- and lower-class whites.

In another study mentioned by Havighurst it was found that the school environment is essentially middle class in its values, teaching, and staff and, as such, it reinforces the attitudes and habits taught to children in middle-class homes. The lower-class child, on the other hand, may find that what the school teaches is not entirely in accord with ways of behaving and believing that he has been taught at home, and while some lower-class children, with the encouragement of their parents, seek to learn at school what they have not been taught at home, there are others who turn against the school and reject the precepts it teaches.

Certainly the burden of proof would fall upon anyone who argues that poverty is an aid to the development of good character traits. According to a study by Stagner (1935), those who have grown up in poor circumstances are more likely than others to show such traits as "nervousness," "social passivity," and feelings of inferiority. Even when those who are regarded as "poor" do not suffer from actual want of food or shelter they will notice differences between themselves and others who are more affluent and this may influence their attitudes toward themselves and others.

A number of differences between parents of high and of low socioeconomic status in attitudes toward children appeared in a

study of the joys and problems of child-rearing mentioned in Chapter Four. Parents in poor economic circumstances gave relatively more emphasis to the physical aspects of child rearing (such as the comforts or discomforts of the family living quarters, adequacy or inadequacy of financial means), while parents of higher status gave relatively more emphasis to the psychological aspects (such as children's personality traits).

One aspect of socioeconomic status, as noted above, is that there often are more children per family in the lower socioeconomic groups and this will have a bearing upon the kind of attention children receive from their parents. The fact that there are many children in the family will not necessarily mean that each child will have a correspondingly reduced amount of attention, for parental love is not sliced like a pie. But even if the mother and father are of a loving sort, and very devoted to their children, the fact is that they will have less time to give to each, more distractions, more calls upon their energy, less money with which to buy a little respite or leisure. In a home where the parents share all they have with their children, and all children get the same portions, so to speak, it may not make much difference that the portions are rather small. Probably a child in a family of two who feels discriminated against will have a harder time, psychologically, than a child in a family of eight who is not discriminated against, even if the actual attention the former receives is far greater. But there is no guarantee that a father or mother in a large family will be less likely than parents in a small family to favor one child above another (or seem to, from the other child's point of view). So, whatever the actual circumstances are, there is perhaps more likelihood that a child in a large family (but not necessarily every child in a large family) might find himself in the position of being, relatively, a rejected child.[14]

Differences in the moral concepts and attitudes of children of

[14] If this line of thought holds true, it might be related to some other observations. For example, as noted earlier, there is evidence that boys of lower socioeconomic status tend to be involved in more sex practices than boys of higher socioeconomic status: According to one view, sexual promiscuity may represent an attempt to achieve, through many sexual contacts, a kind of compensation for lack of a feeling of intimate emotional relationship with anyone.

different socioeconomic groups provide one indication of the differences in social pressures that are brought to bear upon children in different status groups.[15] Some studies indicate that children in some of the lower status groups tend to accept a more arbitrary or authoritarian position as to what is right and wrong, and tend also to condone punishment more than do children of higher status. In a study by Harrower, 1934 (see Chapter Seventeen), it was found that a larger proportion of children in the former than in the latter group regarded cheating, for example, as something bad or naughty in itself, as distinguished from something that is wrong because it is unfair to the other fellow or as something wrong because cheating does not help a person to learn how to get the answers by himself. Again, when asked how to deal with a wrongdoer (for example, a boy who had broken another boy's toy), children in the "lower" group tended to say that the wrongdoer should be smacked, while children in the "upper" group tended much more to advise that the wrongdoer should try to make amends.

This tendency toward a more authoritarian and punitive attitude toward misbehavior in the "lower" socioeconomic groups was noted in a study which compared children from a very formal public school in a rather poor section of a large city with children of the same age and grade in a private school representing relatively "high" social status (Dolger and Ginandes, 1946). In writing a composition about what should be done to Jimmy, a rather obnoxious boy in a story who was always interfering with his older brother, the children in the "lower" group twice as often recommended a "nonconstructive" approach, such as scolding and punishment. In answer to a question as to what to do with Fred, who had stolen marbles from Bob, the "lower" group showed a decidedly greater tendency to condemn and punish rather than to excuse or to help Fred to find an acceptable solution to his desire for marbles. A decidedly larger percentage of children in the "lower" than in the

[15] One difficulty with findings on this subject is that they are not entirely "pure." Children of lower socioeconomic status tend also to have a lower average intelligence, as measured by the typical test, and their concept formation will be influenced by this factor as well as by the example and instruction of their associates.

"higher" group also maintained unconditionally that a child should not talk back to his parents (71 and 15 per cent) or to his teacher (81 and 29 per cent).[16]

The fact that there are differences between children at different socioeconomic levels is not, of course, surprising. The children reflect the values, ideas, and practices of the adults who surround them. It should be noted that there were differences within the groups as well as between the groups, so that in a given comparison a child at one socioeconomic level may be more like a child at a higher or lower level than like his own group.

Awareness of symbols of social position. In addition to reflecting the distinctive manners and values of his own group, the normal child in time becomes aware of differences between groups. He becomes aware also, in time, of symbols that betoken socioeconomic status, such as the silk hat of the man in the limousine as distinguished from the chauffeur's cap. Findings in a study by Stendler (1949a) give information with respect to this. First-grade children showed little awareness of their own social class position. First graders in this study tended to describe their families as rich to a greater extent than did fourth graders but even in the fourth grade some children were not clearly aware of this or other social class symbols; sixth graders were more conservative than fourth graders on this score; and at the eighth-grade level there not only was no child who described his family as being rich but many of the children were reluctant to answer the question. The older children quite generally ascribed to themselves a middle position between poverty and wealth. The children from wealthier homes, by saying they were "in-between," tended to understate their financial circumstances, and the children from poorer homes by similarly saying they were "in-between" tended, at least in relative terms, to overstate their condition. This tendency by children to put themselves in the middle group is in keeping with a finding by Cantril (1946) in a study of adults: Adults at all economic levels tend to identify themselves as belonging somewhere in the middle social class.

[16] For a further study of ethical views as related to socioeconomic status, see Pronko and Snyder (1950).

Children in the first grade were not only inclined to rate themselves as rich, but they also rated a large proportion of their classmates as rich. In naming children who had "lots of money" they showed little agreement with adults. At the fourth-grade level, and even more at the sixth- and eighth-grade levels, the children were much less naive and, at the two upper levels, they could rate with high accuracy (as measured against the judgment of well-informed adults) the financial status of any ten classmates named at random.

The features in his environment which a child notices are not always those which an adult would view as the most noticeable signs of socioeconomic status. In a study by the writer and Tasch (1949) it was found that children living under conditions of poor housing were less likely to mention housing as an unpleasant feature of their environment than children whose living quarters were comparatively good. In a study of children's awareness of poverty by Estvan (1952) it was observed that what is physically near the child is not necessarily psychologically near to him in the sense that he notices and comments on it.[17]

Children near the end of the elementary-school years or at about the beginning of the teens tend to be quite well aware of differences in socioeconomic status. Children's awareness of status differences may become intensified during adolescence as the young person becomes interested in dating and the beginnings of courtship. At this time the disadvantage of living on the wrong side of the tracks, and the advantage of coming from a "good" family, may be brought home to the child quite sharply.[18]

Effects of Nursery-School Experience

In order to learn to live sociably with his fellows, a child must have a chance to associate with other children. Partly for the pur-

[17] Estvan (1952) and Rabban (1950) have discussed aspects of awareness of class and awareness of the sex role in relation to socioeconomic status, sex, intelligence, and other factors.

[18] For an account of increased awareness of status differences at adolescence see Meek (1940). Children's self-awareness with respect to their racial identity has been investigated in studies of Negro children by Clark and Clark, and Horowitz, referred to in Chapter Thirteen. Hollingshead (1949) has discussed the impact of social class differences at the high school level.

pose of supplementing such social contacts as the young child may have with other children in his home environment, an increasing number of parents in recent years have established cooperative play groups or have used the facilities of day nurseries and nursery schools. Several studies have been made to probe some of the effects of such opportunities.

In studies of this kind, it is important to take account of the factor of maturation, among other things; for, in the normal course of development, there are changes in the character of a child's social activities, whether or not he happens to be a member of an organized group.

Group trends. Among the trends indicated more or less conclusively by studies[19] in this area are the following: Nursery-school children have shown an increase in participation in group activities and in number and variety of social contacts, and a diminution of "onlooker" forms of behavior; they have shown an increase in poise and spontaneity in social participation and a decrease in the tendency to show fear of other people, to shrink from notice, and to hover near adults. In several studies, it has been noted that the average nursery-school child has improved in his routine habits—competence in self-help in eating, dressing, toileting, and so forth —with resulting increases in freedom of action and diminished dependence upon adults.

Nursery-school attendance can help to dilute tensions between a child and others in the home environment. Indeed, one very important, although little publicized, function of the nursery school is to free the mother for a little while from the necessity of meeting the child's continuing demands. Even the fondest mother discovers that a two- or three-year-old child "gets in her hair" at times. Although no study has been made of the extent to which the respite helps the mother to put more verve and patience into her dealings with the child during the rest of the day, the likelihood is that the effects are good.

[19] Representative studies that deal directly or indirectly, in whole or in part, with this problem include investigations by Cushing (1934), Hattwick (1936), Jersild and Fite (1939), Kawin and Hoefer (1931), Murphy (1937), and Thompson (1944).

Gains have also been noted, as one might properly expect, in children's skill and resourcefulness in using the play materials and equipment provided by the nursery school. Some of these gains may be only temporary, to be sure, or restricted largely to the nursery-school environment, especially if different habits are cultivated at home.

It is noteworthy that the children's gains in sociability in the nursery school do not mean that the individual children are being submerged more and more by the group. Rather, along with an increase in sociability, it has also been found that there is an increase in the child's tendency to exercise independence, to assert himself as an individual, to stand up for his interests and his rights as he sees them. In observations of nursery-school children it has been found, for example, that children's scores in resistance (the number of times they refused, by word or deed, to carry out the demands of others, to yield ground to another, and so on) were somewhat more closely related to the length of time the children had spent in nursery school than to the factor of chronological age (Caille, 1933). Again, it was observed in one group that children who, at the beginning of the school year, were rather unaggressive showed an increase in their tendency to attempt to make themselves the center of an activity; on the other hand, those who showed this tendency more strongly when the school term first began continued to retain this characteristic with the passage of time (Ezekiel, 1931).

Individual variations. The foregoing statements are based upon general trends or averages for entire groups and relate primarily to effects noted during nursery-school attendance or within a short period thereafter. Actually, many children fail to conform to the general trend.

In one study (Jersild and Fite, 1939), it was observed that, while the groups as a whole showed a sharp increase in frequency of social contacts, some children showed relatively little change, and two children seemed to show a setback when behavior in the spring was compared with records of behavior after the school year began in the fall. Indeed, the adjustments that are made and the changes that may be exhibited are likely to vary considerably from

child to child. To gauge the effect of nursery-school experience and fully to appraise its value would require intensive study of the individual child, but the general drift of findings based upon surveys of groups is still significant and has practical implications.

Table XI illustrates the extent to which individual children may change during the course of a year. In the study on which this table

TABLE XI

PERCENTAGE OF INTERVALS DURING WHICH SOCIAL CONTACTS OCCURRED[20]
(Chronological ages in years and months, in the fall, are shown in parentheses.)

"New" Children (without previous nursery-school experience)			*"Old" Children (with one or more preceding years of nursery-school experience)*		
Name	*Fall*	*Spring*	*Name*	*Fall*	*Spring*
Alice (3–6)	42.0	82.5	Holden (2–11)	67.3	45.0
Thelma (3–8)	25.7	58.8	Dennison (3–0)	64.0	81.3
Dick (3–9)	25.7	64.5	Nancy (3–6)	58.3	83.8
Sally (2–10)	25.7	43.8	Evan (3–6)	53.3	71.3
Morris (3–10)	14.0	47.5	Kirk (3–5)	46.3	71.3
Nell (3–1)	10.0	61.3	Joyce (2–10)	21.7	42.5
Sammy (2–10)	6.0	21.3	Bernard (3–8)	19.3	12.5
Average	21.3	54.2	Average	47.2	58.2
Children "new" to the group but with one year of previous experience in other, separate, schools:					
Jerry (2–10)	50.3	73.8			
Carter (3–6)	36.7	71.3			

is based, each member in a group of children was observed in the fall, soon after the beginning of the school term, and again in the spring, near the end of the school year. A count was made of "social contacts"; the child received a tally of one for each half-minute period during part or all of which he engaged in social interchanges with other children.

It can be noted that the "old" children represented in Table XI

[20] Adapted from A. T. Jersild and M. D. Fite, *The Influence of Nursery School Experience on Children's Social Adjustments*, Child Development Monographs (New York: Teachers College, Columbia University, 1939), No. 25, 112 pp. Reproduced by permission.

exhibited more than twice as many social contacts, on the average, at the beginning of the school year as did "new" children who had never before attended nursery school. But by spring, the two groups were practically equal. Indeed, computations not shown in Table XI indicated that the "new" children began to gain rapidly on the "old" ones during the first few weeks of school.[21]

An analysis of the behavior of individual children showed that a large proportion of the social contacts exhibited by the "old" children in the fall consisted of interchanges between pairs of children who had become close friends during the preceding year; but even when such contacts were discounted, it did appear that the veteran nursery-school children surpassed the new recruits in readiness to enter into social enterprises when the school year began. However, as noted, the new children had not sustained a permanent disadvantage by not having had one or two previous years of experience; even while not attending nursery school, they were maturing and gaining such experiences as children may encounter outside of school, and, when given a chance, they quickly made up for lost time. This does not mean, of course, that by delaying a year a child can gain as much from nursery school as he would gain had he attended that year as well as the year before. To measure the values that are gained from earlier attendance would require a more intensive investigation. It would be necessary also to have information as to whether the same facility in making up for lost time would appear as children grow older.

The effect of nursery-school experience or of any provision that enables a child to be with other children will depend, of course, upon what the school or the play group offers. A school that has clearly formulated educational objectives may have quite a different impact on the child's behavior than a school which has no well-defined policies. This is brought out impressively in a study by Thompson (1944) in which a comparison is made between children

[21] It is not here taken for granted that the more "social contacts" a child exhibits the better off he is. Although an increase in sociability, as measured by the present techniques, usually represents a wholesome trend, his social adjustment cannot be determined simply by a tally of his social contacts, without regard for the nature of his contacts and the larger pattern of his behavior.

in two nursery-school groups with differing policies with respect to the role of the teacher. In both schools (designated *A* and *B*) the teachers were instructed to be responsive to the children, but in school *A* the teacher was instructed to make a minimum of contacts with the children on her own initiative and to let the children work out their own plans and activities, assisting only when asked. In school *B* the teacher was instructed to participate more actively, to try to become a warm friend of each child, to guide the children's thinking and activities into productive channels *not* by telling the children what to do but by her own interested participation and willingness to supply information, to cooperate, to supply and arrange materials in the most constructive manner. At the beginning of the experiment the children in groups *A* and *B* were equivalent; at the end of the experiment (eight months later) they differed in many ways (as measured by quantitative records of their behavior). As a group, the children who received teacher guidance excelled the group with little teacher guidance in *constructiveness* when faced with possible failure, in *ascendant behavior*, in *social participation*, and in *leadership*. The group with a carefully planned guidance policy also showed fewer *nervous habits*, but the difference in this particular was not statistically significant, and there was no significant difference between the two groups in IQ.

Although such a study as the foregoing indicates that the educational policy of a nursery school may have quite pronounced effects on the behavior of children, it does not presume to show to what extent these outcomes within the nursery school also influenced the child's life outside of school or his behavior at a later age. It is likely that the effects would not be entirely limited in time and place, but further study would be needed to throw light on this point.

Apart from the general educational policy of a school, it is likely, also, that the benefits children derive will be influenced to a large degree by the personality and competence of the teacher. As noted in an earlier section, some nursery-school teachers make a constructive approach when dealing with children's conflicts with one

another, while other teachers tend to take a more disciplinary and arbitrary approach.[22] Similarly, some teachers have clearly formulated goals while others seem to be opportunistic in what they do.

A revealing account of just what it is a nursery school teacher does in her moment to moment and hour to hour contacts with children has been given by Rigney (1952). A record was made of all the practices used by several experienced and several relatively inexperienced teachers. The most conspicuous finding was the vast amount of attention given to "routines"—helping children with wraps, picking up, arranging materials, and so forth. These practices constituted about a third of all practices. The second largest group of activities consisted in those involved in impressing children with the duties and rules governing the use, care, and protection of materials and property. In other words, much attention was given to the external aspects of the environment and external characteristics of behavior as distinguished from helping children to gain in understanding of others or in gaining in awareness of their own interests, purposes, and feelings. Rigney raises the question as to whether this emphasis is inevitable: "In wiping noses, buttoning pants, everlastingly washing, tidying, 'resting,' keeping objects in their place and handling them just so, are we evading rather than meeting up with realities in the lives of children? In coming closer to children's physical and material needs, do we, whatever the reason may be, leave little time and emotional energy for deeper psychological involvement with children?" The implication is clear that nursery-school teachers might profitably re-examine the nature of the curriculum they provide for children through what they do for or with children from moment to moment. But if this applies to nursery-school teachers (who in many ways are far closer to the feelings and going concerns of children than teachers of older children), it probably presents an even greater challenge to kindergarten, elementary, and high-school teachers. (We mercifully leave college teachers out of this!)

[22] Differences in the attitudes and practices of different teachers are shown in studies by Landreth *et al.* (1943), and by Nesbitt (1943).

Influence of Skills on Social Behavior and Adjustment

Whether a child be young or old, lack of competence in the activities normally engaged in by his group is likely to affect his social relationships.

One can repeatedly observe evidences of the ways in which a child who lacks motor skill may be barred from social participation. When his playmates dash across the playground on tricycles or down the street on roller skates he is left behind or must follow on foot; when they climb, he is left watching on the ground. In countless ways, he is "out of it." Sometimes, to be sure, a child who is inept in the use of his limbs will make extra use of his wits in directing the play into channels where he can hold his own. Furthermore, lack of motor skill will have varying effects in the case of different children; some seem to get along quite well either by contentedly taking the role of an onlooker or by finding other activities that seem to satisfy them.

Skill in everyday games and occupations is important, but this does not mean that every child, in order to be well adjusted, must be an athlete or a jack-of-all-trades. It can be noted, however, that children who lose their stride in activities and skills which are important in the social life of their peers may react in ways that are not advantageous. They may exhibit timidities and fears where other children are well at ease; they may seek the companionship of younger and less stimulating companions; they may stay away from club meetings, parties, or other get-togethers that happen to call for a display of skills in which they are deficient; or they may become the butt of teasing and ridicule.

Changes in social behavior. The way in which a gain in proficiency in handling a situation may influence a child's role in social dealings with others is provided in an investigation by Jack (1934). A number of children were first studied to note their tendency to be ascendant or nonascendant in their relations with others, the extent to which they exhibited such behavior as verbal attempts to secure

play materials; forceful attempts to secure play materials; success in procuring play materials; efforts to defend or retrieve possessions; attempts to direct the behavior of a companion; directing or supplying a pattern of behavior for the companion to imitate; and criticisms, reproofs, and interdictions directed against companions.

Five children who were found to be least ascendant were chosen for special study. These children were helped to achieve competence in certain performances. One performance involved the construction of designs in fitting mosaic blocks into a cardboard frame; in another, the child learned to fit together the parts of a picture puzzle; in a third, the experimenter read a story to the children, and after the story had been told three or four times, a child was invited to join with the experimenter in telling the story until he could tell it alone. After the children had learned how to enter into these activities and had become competent in them, each of the five children was observed when paired with other children while dealing with these materials. The five children showed a distinct change in their relations with their companions following the period of training. They now more often showed a tendency to lead, to assert themselves, to direct the other child, and to exhibit "ascendant" behavior than in the initial series of observations. In other words, the children had gained more from this experience with a friendly adult than just the ability to carry out the mechanical details of a performance. Their experiences had helped them to use the performance as a bridge to others.

In everyday life, situations frequently arise in which an adaptation of the techniques used in the study cited above might be used in practical ways. The value of special coaching, help in acquiring skills that are useful in social intercourse, and help in overcoming handicaps that have arisen through lack of opportunity or faulty procedures is frequently demonstrated in the practical experience of parents, teachers, playground supervisors, and camp counselors (Osborne, 1937).

In many situations in which a gain in practical skill seems also to help a child in his dealings with others the reason probably is not simply that he is more competent but that his attitude has changed:

The experience of working with a friendly adult, having a taste of companionship with the adult, and success in the relationship, may have had a significant influence on the child's conception of himself. One of the best means of helping a child to test his ability to deal with others, to express and face his timidities and fears, to find whether or not he will be reproved and rejected if he asserts himself is to undertake a practical project with him, ranging from a game of checkers or work on a jig-saw puzzle to more elaborate activities, such as hiking and camping. The common task makes it possible for the child to be silent when he chooses, yet his nearness to the adult makes it possible for him to talk about the work or about himself if he so desires. The work makes it possible for him to make mistakes and to observe that he will not be condemned, to proceed slowly and observe that this adult is not going to hurry him, to venture a little criticism while observing that it brings no retaliation, to express self-reproach about his own lack of skills while observing that he is not therefore abandoned as a failure, and so on. In more extreme situations, it is in connection with a common task that a child might show his temper, or burst into tears, or express deep grievances, and the like. In this manner, a common task often can provide the physical medium for a psychological relationship in which there is subtle communication between a child and one who wishes to be his friend and to help him. The child, without having to ask for help, or seem like a weakling or a beggar, can explore this relationship, exploit it, and venture into an expression of his feelings and grow in his understanding of what might be expected of others, as well as in an awareness of his own wishes and his own rights.

Apart from active attempts to promote skills of various sorts, another procedure which teachers often find useful in aiding a child toward confidence in social relationships is to encourage him to exercise special abilities and talents which he already possesses. A child who habitually is on the fringe may play a new role when an adult recognizes the light which the child hitherto has hidden under a bushel or sponsors group projects that give the child a chance to show qualities that are not called for in the group's

ordinary run of activities. Again, it has been found that a child who is overwhelmed or is shy and retiring in his customary group contacts may find his stride if transferred for a time to a new group or if placed for a time in a group in which the pace is less trying. Sometimes a child becomes resigned to an unimportant role, and the group comes to take for granted that he is a shy "fringer," so that he occupies this role more from force of habit than from lack of potential ability. If given an opportunity, without being pressed or urged or without being overwhelmed, many children who are backward socially are likely to seek ways of making contacts and of getting into group play.

Influence of Adult Direction and Management

In everyday life, it is possible repeatedly to observe the way in which children's social reactions to one another can be influenced by the kind of direction they receive from adults who are in charge of the group. The adult influences that affect children's social relations may range all the way from subtle and relatively intangible factors to concrete practices and policies. Fite (1940) has described how a teacher may betray her attitude toward a child and, in effect, give other children to understand that it would be all right for them, for example, to attack a particular child whom the teacher disapproves.

The example set by the adult may have an important effect. Observations reported in the study by Osborne (1937) show how the attitude of camp counselors toward various activities may influence children. When the boys in this study first came to a summer camp, their game preferences followed conventional notions as to what a robust ten-year-old child should like to do, but the counselors were not bound by these stereotyped ideas and soon many of the youngsters joined in forms of play that, under other circumstances, they might have regarded as "sissyish."

The fact that children respond more favorably to an adult who identifies himself with their concerns and is pleasant in his dealings can be observed repeatedly in everyday life, as well as in re-

search studies (Anderson and Brewer, 1945; Lafore, 1945). Table XII shows qualities and characteristics of teachers who were "liked best" and "liked least" as described by pupils and, in retrospect, by graduate students. At all grade levels represented in Table XII the

TABLE XII

RELATIVE FREQUENCY OF MENTION OF VARIOUS CHARACTERISTICS IN DESCRIPTIONS BY PUPILS OF TEACHERS WHOM THEY "LIKED BEST" AND "LIKED LEAST OR DISLIKED MOST" AND IN SIMILAR DESCRIPTIONS BY ADULTS ON THE BASIS OF RECOLLECTIONS OF THEIR ELEMENTARY SCHOOL TEACHERS[23]

	Teachers "Liked Best"				*Teachers "Disliked Most"*			
Age level of persons reporting	5–8	9–12	13–17	Over 20	5–8	9–12	13–17	Over 20
Grade level of persons reporting	1–3	4–6	7–12	Post-graduate	1–3	4–6	7–12	Post-graduate
Number of persons reporting.	25	303	298	137	9	99	265	137
Total number of items mentioned	49	370	604	443	15	170	459	414
I. Human qualities as a person (friendliness, meanness, etc.)	18	22	28	43	20	21	32	43
II. Physical appearance, grooming, etc.	0	7	5	18	7	8	7	13
III. Qualities and performance as a disciplinarian (including fairness and strictness)	23	24	26	19	47	43	35	31
IV. Participation in pupils' activities, games, non-academic interests	20.5	6	3	2	7	1	1	.2
V. Performance as a teacher, teaching ("knew a lot," "made it clear," etc.)	20.5	27	32	12	7	17	18	13
VI. Miscellaneous	18	14	6	7	13	10	7	.7

students gave less emphasis to the strictly academic than to more personal aspects of the teacher's performance. This tendency to emphasize the personality of the teacher was most prominent in the reports made by adults who looked back on the teachers they had during their childhood.

In an experiment by Lippitt (1940), comparisons were made be-

[23] From A. T. Jersild, "Characteristics of Teachers Who Are 'Liked Best' and 'Disliked Most,'" *Journal of Experimental Education* (1940) 9, 139–151. Reproduced by permission.

tween children's responses to "autocratic" and "democratic" management of small clubs with five members. It was noted that as time went on the children who were treated in a peremptory manner showed more aggressive domination in their relations with one another than did the children with whom techniques of a man-to-man character were used. Expressions of hostility, resistance, demands for attention, hostile criticism, and competition were more than twice as frequent in the former group. In the "authoritarian" groups, the relation of the children to the leader tended to be one of submission or of frequent demands for attention, while the relations between the children and the adult leader in the "democratic" group were more free, spontaneous, and friendly.

This line of experimentation was carried further in a study reported by Lewin, Lippitt, and White (1939). Three types of adult direction were used in connection with such activities as mask making, mural painting, soap carving, and model airplane construction.

The "authoritarian" leader was dictatorial; he decided everything that was to be done, one thing at a time; he was "personal" in his criticism and praise; and he remained aloof, without actively participating in the work of the group, except when demonstrating (a skillful autocrat would, of course, use more subtle techniques).

The "democratic" leader permitted group discussion and group decisions within the broad limits of the experiment, allowed more freedom, participated actively as a regular member, and was "objective" in his praise and criticism.

The "laissez-faire" leader allowed complete freedom, did not participate in the activity or discussion of plans, and made infrequent comments on the activities of the club members. The same leaders variously applied the three types of direction with different groups, so that the factor of the personality of the leader was controlled as far as possible.

Under autocratic management one of the groups showed considerably more aggressiveness than did groups with democratic management, while other children who were handled autocratically reacted by showing a good deal of apathy. However, also in an apathetic group it was found that, when the autocratic leader left

the room, there was a sharp rise in the amount of aggressiveness shown by the children.

In response to interviews, nineteen of the twenty boys stated that they liked the leader in the democratic setting better than the leader in the autocratic setting; the one exception was a boy who liked the leader because he "was the strictest." According to their own accounts, in seven cases out of ten, the children preferred the laissez-faire leader to the autocratic leader.

On two occasions, following the deliberate intrusion of an adult who criticized the work of the children, fighting broke out immediately afterward among children who happened to be together in an autocratic group. Among the factors that appeared to increase the tension in the autocratic groups were the higher frequency of directions given by the leader—which, in effect, put more pressure on the children—restrictions of freedom of movement, and greater rigidity of the group structure.

In several studies it has been found that children respond favorably to "newer," more democratic practices in the classroom, such as prevail in an "activity" program or in schools that have adopted "progressive" principles (Jersild, *et al.*, 1939; Wrightstone, 1938). Among other matters it has been found that children in such classes tend to show more initiative, a higher quality of cooperation and leadership. In a study by R. L. Thorndike *et al.* (1941) it was found that children from "activity" schools were, if anything, more courteous and more responsible in their conduct when on field trips (such as a visit to the museum) than children from control schools.

Democratic procedures with children not only are more pleasant but are more efficient than an arbitrary, autocratic, or authoritarian approach.

Variable effects of different practices. An adult may, of course, use tactics that will cause irritation no matter what the general philosophy of his approach to a child might be, but an effort to try out a democratic approach may have beneficial outcomes even if it takes an effort at the start. Bavelas and Lewin (1942) found that some adults who habitually had used authoritarian methods in dealing with children could be helped to adopt more democratic

techniques by way of lectures, demonstrations, and an opportunity to practice and to discuss. In this study it also was found that the morale of the adult leaders (in a recreation center) improved after the shift to democratic practices.

It should be noted that when an adult sets out to use democratic methods it does not mean that he drops his role as an adult and simply becomes an easygoing member of the gang. In most situations it is likely that democratic procedures will call for more rather than less ingenuity and active participation. Moreover, the use of democratic methods by the adult does not mean that he merely turns the leadership over to one or two children in the group. As a matter of fact, one of the problems involved in democratic procedures in the classroom is that the more a teacher tries to consult, plan, and participate rather than to ride herd, the more opportunity there may be for a few alert, talkative, and enterprising children to monopolize a large proportion of the discussion and to "run things."

Prejudice

From an early age great numbers of children are exposed to influences which produce prejudice.[24] Prejudice is a kind of societal sickness. It has three unhappy aspects: It is damaging to those against whom there is a prejudice; it reveals an unhealthy condition within the person who is prejudiced; and it creates difficulties for the total social group. Prejudice involves an unfavorable bias against certain people or groups. This means that a person belonging to a group against which there is a prejudice is regarded with misgiving, and perhaps with suspicion, disfavor, distrust, or deep hostility, not because of his individual qualities but because he belongs to a group against which a stand has been taken.

Prejudice involves a kind of prejudgment, a tendency to generalize an attitude of disfavor. The first encounters with members of a group against which one is prejudiced may (or may not) in reality

[24] In a study by Ammons (1950) evidence of active prejudice was found as early as four years.

have been unpleasant, and an attitude of distaste and distrust resulting from such experiences may (or may not) have been quite justifiable. For example, when a Negro child is bullied by white people or a white child is bullied by some Negro people both children have a good reason to feel resentful. Such resentment is not in itself a prejudice. However, if because of an unpleasant experience of this sort (or other less direct and forthright experiences) the Negro child retains an attitude of dislike and distrust toward white people in general, whether they happen to be bullies or very friendly people, and if the white child similarly takes an unfavorable view of Negroes, each has a prejudice. The child's experience with some members of the group he now is biased against may have been so painful that his hatred of all members of a group is quite understandable, but it is prejudice, nonetheless.

Prejudice and guardedness based on realistic and unrealistic grounds. While prejudice often reflects a very unhealthy condition it should also be remembered all children, and even the most healthy among them, are likely to acquire prejudices from time to time in the form of antipathy or distrust arising out of direct personal experiences. In their everyday lives children are bound to encounter people who are unfriendly and who hurt them or make them feel uncomfortable. When a child has been frightened or hurt by someone he is likely to retain a feeling of suspicion or ill will, and this may last a long time. The fact that a child who has been hurt is defensive in his attitude toward people who have hurt him or who might hurt him is not in itself a sign that he has an irrational prejudice. For their own safety children in some communities have to be guarded and suspicious in their dealings with some people in their environment. As long as such attitudes have a realistic basis, and continue as realistic means of dealing with hazards in the everyday environment, they should not be regarded as prejudiced. It is when children or adults begin to inflict their own anger on innocent people and support their ill will toward others by irrational devices that are destructive to others and to themselves that we have prejudice in its really damaging form.

There is another aspect of the subject which should be mentioned

briefly—that a child's affinity for one group does not necessarily mean prejudice against another group. In the process of finding friends children will select some youngsters and not others. The fact of loyalty to one group usually, as a practical matter, involves a certain amount of social distance from other groups. In such a situation, prejudice may be suspected however, even though it does not exist. But the situation is different when friendship formation and choice of companions and group membership are determined solely or to a large degree on pre-existing prejudice.

Emotional accompaniments. The fact that prejudice has ramifications beyond simply an attitude toward a minority group has been shown in various studies. Persons who are already anxious and insecure and who harbor veiled hostility are more likely to show prejudice than those who manifest less fear, hostility, and insecurity, as indicated in a study by Gough, Harris, Martin, and Edwards (1950). In another study by Harris, Gough, and Martin (1950) there was evidence to support the hypothesis that prejudice is likely to be more prominent in children who have authoritarian parents who tend to become ruffled by the ordinary annoyances involved in child rearing. In a study by Frenkel-Brunswik (1951) it was observed that children with prejudices toward ethnic groups tended to show personality manifestations, such as aggressiveness, fear of imaginary dangers, and exaggerated adherence to conventional standards. In like manner a study by Ammons (1950) of young children indicates that prejudice is associated with insecurity.

Prejudice as a projection of personal difficulties. Prejudice sometimes arises because a person is troubled with unresolved and unrecognized problems which leave him in a state of being anxious, insecure, and in conflict. One attempt at finding a solution is to discover a convenient scapegoat on whom the troubled person can blame his problems and upon whom he can project his anger and discomfort. This tendency to project one's anger on others and to attribute one's misfortunes to others appears in many ways, of course, but it takes the form of prejudice when one hits upon a certain group or class of people as the bearers of blame and as a means of escape from blaming oneself.

Prejudice as a form of displaced anger. As already indicated, there are findings which suggest that if a person has a tendency to be bitter and hostile he is more likely than a serene person to show prejudice toward this or that group. Prejudice may take the form of what is known as *displaced anger*. Displacement of anger occurs when a person is angered as a consequence of frustrations from one source or another and then centers his anger upon something other than the condition that originally aroused it. A child displaces his anger when, for example, he is angered by his clumsiness in missing a ball and then throws his glove on the ground and tramples on it. He likewise displaces his anger when he "takes out" on a younger brother the ire aroused by a scolding from his father. There is a displacement of anger by way of prejudice if children make members of a minority group in their school the butt of the anger and irritations that are aroused in their work at school and in their relationships with one another.

The tendency to extend an attitude to many other persons is seen in its most sweeping form when a person has a prejudice not just against this group or that but against all human beings. Some children at quite an early age (well before the elementary-school age) react to people as though they viewed all comers with suspicion and distrust. This can be seen in children who have associated with people who are predominantly hostile and forbidding and who have learned through bitter experience to be defensive and suspicious and who take it for granted that other human beings have unkind intentions.

More often, however, prejudice as we see it in everyday life is confined to a given group. The most noticeable manifestations of prejudice are those directed against people of a given race, religion, or color; quite common, also, are prejudices related to social class, socioeconomic status, political affiliation, national affiliation, and the like. The need to project hostility may be spun so fine that even within a scientific discipline one can find groups holding a prejudice toward one another.

Rationalization of prejudice. When children have acquired prejudices they tend to retain them with the passing of the years.

As children grow older and better informed, more able to reason and to weigh the pros and cons of problems they meet, they do not automatically go through a process of re-examining prejudices which they began to form when they were younger and less informed.[25] An improvement in ability to think incisively on new problems (especially those not emotionally toned) may exist side by side with remnants of childish attitudes. Prejudices are among the more distinguished inhabitants of what has come to be known as the logic-tight compartments of the mind. One result of this is that bright children may be just as irrational in their prejudices as children who are not so bright, and adults with brilliant minds may be as childish in their prejudices as people who are stupid. At the adult level, one of the marks of an intellectual person with a ripe set of prejudices is that he is very alert to the prejudices shown by others, but is blind to his own.

It is rather simple to support a prejudice, at least on a superficial level, for in any large group of people there will be some who are mean and unpleasant, and one needs only to notice the meanness of some people in a group against which one is prejudiced and overlook similar meanness in people of other groups. Such grounds for prejudice are rather shaky, but the same is true of any kind of reasoning undertaken to support an emotional bias and a foregone conclusion. Others who do not happen to share the prejudice (or who have other prejudices to keep in a good state of nourishment) may not be taken in by the line of reasoning by which a certain person justifies his prejudice but, for the time being, it is enough that he is taken in by it.

When a person thus seeks reasons to bolster an attitude which otherwise would create conflict and uneasiness we say that he *rationalizes*. The wide prevalence of prejudice in adult society means that children are provided with copious models of the process of rationalization. By the same token, children are freely exposed to the process by which adults achieve self-deception. Sooner or later the

[25] Studies by Zeligs (1938) have dealt with the social attitudes of children who were first studied at the sixth grade and again in adolescence. (See also Zeligs, 1950a and 1950b). A book by Lewin (1945) deals with social conflicts, including prejudice.

child who is prejudiced is driven into the same process. He may not resolve his scruples, but he may succeed in pushing them aside. When a person thus defends or supports a prejudice by devious and makeshift reasoning, he is being false to himself in the sense that he does not openly and forthrightly examine his position. So he is, in this respect, divided against himself. Stated differently, he is adopting an irrational position, which might also be called a neurotic position, at least as far as the sway of his prejudice is concerned.

Prejudice as alienation from others and from self. Where there is prejudice it means that an element of alienation and strangeness has entered into the child's social relationships. The child's pre-established suspicions and dislikes come between him and those he is prejudiced against. When a child is prejudiced he is also to a certain degree alienated from himself, for the more prejudiced he is, the less able he is to be spontaneous and wholehearted (or "natural," as we sometimes say). Prejudice often (if not always) involves an element of falseness and furtiveness, and this may develop to a point where a person succeeds in fooling himself.

As a child grows older and retains his prejudiced feelings against certain people he may be hazy and uneasy as to why he has these feelings and he may have doubts as to their validity, and so he casts about to find reasons to support them. Adults frequently help him in this search. Moreover, a conflict (open or thinly disguised) is likely to arise between the growing child's prejudices and the moral principles he is taught. For example, he may attend a church where he is told he should love others as he loves himself, but such a belief does not fit well with the idea of hating (or at least disliking and distrusting) the people he is prejudiced against. So he may feel uneasy on this score. This gives him further need for supporting his prejudices and justifying them, for he needs to defend his own position within himself. So a process of self-justification gets under way. He discovers new reasons for not feeling warmhearted and friendly toward the people he is prejudiced against, and he tries to verify and confirm old reasons.

Prejudice leading to retaliatory prejudice. One thing that makes prejudice so divisive socially, and so difficult to deal with individually,

is that people tend to think of prejudices as belonging to the other fellow. Often, when people speak out against prejudices they are directly or indirectly, but unwittingly, expressing their own prejudices. Usually, however, prejudice is two-sided, and that is understandable enough when we realize how ready all persons are to repay anger with anger and hate with hate. If Jim belongs to a group that is notoriously prejudiced against my group (and so against me) it is likely that I and my group will also be prejudiced against Jim and his group, although we may refuse to face that fact. If X and his group are prejudiced against me because I am of a certain race, or subscribe to a certain religious creed, there are two crucial psychological facts involved, one of which pertains to X and the other to me. So far as X is concerned the very fact that he has this prejudice indicates that he probably is suffering from some kind of disturbance (which may be quite mild or quite severe). Why should he bother to be prejudiced against me in the first place (I was doing him no harm) unless he were insecure, or anxious, or felt threatened, or felt hostile, or felt a need to find someone to be angry at, or felt a desire to inflict a hurt? Second, as far as I am concerned, the fact that X and his group *are* prejudiced against me quite probably sets up some kind of psychological disturbance and distress in me even though my attitude toward X at first was friendly or neutral. It is, in actual fact, somewhat threatening (and it may even be dangerous) when someone feels strongly against me. So far, I am being realistic (and not prejudiced in the meaning here employed). But then something else may come into the picture. For I, too, may be somewhat insecure and the more insecure I am, the more threatening the disapproval of X and his group will be. So I may magnify their hatred. If I already am somewhat anxious, or envious, or full of grievances, or have a compulsive need to be liked and admired by everyone, then the meaning I attach to the prejudice X and his group have against me may reach unrealistic proportions.

In the chain reaction through which one against whom there is a prejudice reacts by becoming prejudiced it is likely to be the member of the minority group that has the most difficulty. Members of the minority not only have to bear the grievances that are visited against

them by the majority group but they also have the disadvantage of not having the strength to retaliate in kind, or unaided, to right the wrongs they feel are imposed upon them.

A study by Goff (1949) gives a moving account of problems and emotional difficulties which members of a minority group perceive as arising from the fact that they are members of this group. Goff interviewed 150 Negro children in two cities. Among the difficulties the children had to face (as seen and interpreted by them) because of their race were disparagement and ridicule, and other aggressive and hostile acts. According to an analysis of the accounts given by these children, almost half of them suffered from feelings of self-belittlement as indicated through experiences of shame, hurt feelings, embarrassment, and the like attributed to such experiences. A finding that is of interest in this study is that girls seemed to smart more severely than boys under what they regarded as rude and humiliating treatment.

Communication of prejudice. A child may become prejudiced because of a firsthand unpleasant experience, as we have noted above, but prejudices are also communicated at second hand. From an early age, children are conditioned by the attitude shown by their elders. Other things being equal, a child will tend to be favorably disposed toward people whom trusted elders express a liking for, and he will tend to be disposed against someone whom his elders dislike even though he has had no significant firsthand experience with these people. In studies conducted by Radke and her associates it was found that when children expressed attitudes toward minority groups in America many of them revealed derogatory views regarding groups, even though they had had little or no contact with members of the groups.[26]

One way in which prejudice is communicated is through what is called the "stereotypes." Many stereotypes which are unfavorable to this group or that are passed on carelessly and unthinkingly in everyday life in the form of jokes and speech habits, or cartoons.

Probably all who read this are familiar with examples of prejudice or implicit prejudice that are passed on in this way in a second-hand

[26] Radke and Sutherland (1949); Radke, Sutherland, and Rosenberg (1950).

manner. Transmission of prejudices reveals a good deal concerning the mentality and moral development of those who thus communicate ill will. It is an interesting fact that adults who like to be thought of as friendly and charitable in their attitude toward mankind can be so thoughtless and unfeeling in the offhand way in which they refer unfavorably or even cruelly to other groups of people.

One interesting fact is that many people with religious affiliations have been found to show quite pronounced prejudices, even though their professed beliefs are completely incompatible with the prejudices that are expressed.[27] The fact that active or tacit prejudice of a very uncharitable sort often exists side by side with profession of strong moral or religious beliefs is one factor among many that complicates and confuses the moral and emotional development of children.

One unfortunate effect of even a small leaning toward prejudice is that a person tends to perceive and interpret new happenings in the light of attitudes he already holds, and when he is called to account, his tendency is to defend rather than to question a position he already holds.[28]

Prejudice as a barrier to communication. Another unfortunate effect of prejudice, therefore, is that it tends to block emotional communication between people and to reduce a person's emotional communication with himself. Those who are prejudiced against each other tend to lose sight of the fact that people in the rejected group are also human beings with the same sensitiveness, the same fears and grievances, the same desire to be accepted, the same bitter revulsion against being rejected as they themselves possess. As a result of his prejudice against another, a person tends, in effect, to

[27] A revealing account of factors associated with prejudice has been given by Adorno, Frenkel-Brunswik, Levinson, and Sanford (1950). Their findings suggest that what a person calls his "religion" may amount to little more than external affiliation with an institution rather than a kind of personal commitment. However, when it is found that some religious people are, if anything, more prejudiced in some respects than some groups of people who profess no religion, it does not mean that religious persons are strongly inclined toward prejudice; rather, it probably means that they are not very strongly inclined toward religion.

[28] The fact that the way in which children perceive members of different groups is related to their attitudes toward the group has been brought out by a study made by Radke, Sutherland, and Rosenberg (1950).

dehumanize this other person, and this means that by the same process and to the same extent he dehumanizes himself. The deeper a prejudice is, the less room there is left for compassion.

When a person is prejudiced it means that he is to a degree repudiating the humanity he has in common with others. This is all the more true by reason of the fact that prejudice often hinges upon what we in this book have called the externals of personality: Skin color, family history, and the like. On the other hand, the more a person realizes his own selfhood and draws freely upon his own resources for feeling, the less likely he is to emphasize these externals. The more he looks inward the more he finds in common with others, for he will realize that fear in a black person is just as frightening as fear in a white person, shame in a Jew is just as painful and debasing as shame in a Gentile, grief and loneliness are just as hard to bear in the rich as in the poor, pain is just as agonizing in a Protestant as in a Catholic. This thought is a little too "mature," perhaps, to be grasped by a child who is just in the process of beginning to acquire prejudice, and yet even a child is able to grasp the underlying emotional meaning. The problem of prejudice, especially at an early age level, is essentially a problem in the area of emotional development, and since adults are largely responsible for the emotional climate in which prejudice arises it is a problem which they must face rather than one which children themselves can solve.

Prejudiced attitudes toward others in relation to attitudes toward self. Many of the observations noted above, and others that we might notice, add up to this: A child's attitudes toward others, as exhibited by way of his prejudices, are closely interwoven with his feelings about himself. In a study by Trent (1953) dealing with Negro children, it was found that Negro children who were most accepting in their attitudes toward themselves showed significantly more positive attitudes toward Negroes and whites than children who were least accepting in their attitudes toward themselves. Children who were most rejecting in their attitudes toward white people also tended to be rejecting in their attitudes toward Negro children and toward themselves. More of the Negro children who, according to

tests that were used, showed a low degree of acceptance of themselves said they wished they were whites; in other words, those who repudiated themselves most tended also to repudiate their own group most. Trent found that boys in his group were more self-accepting than girls. This is in keeping with a finding earlier reported by Goff which indicates that membership in the Negro minority group apparently bears harder upon girls, as they see it, than it does upon boys.

Attitudes toward self and others are closely intertwined. Stated in its broadest terms, this principle means that a youngster who hates himself will probably also hate others. In several other sections of this book we deal with this same relationship, and we need not elaborate on it here. But it may be emphasized again that in dealing with the problem of prejudice we are not simply dealing with a social problem but with a symptom of personal difficulty. This means that to deal with the problem of prejudice we need not only to face the sociological facts involved but also to pay attention to the personal aspects of the matter.

Here, as in most other matters, it is necessary to look at both the subjective and the objective angle. To help children who are victims, or might be victims of prejudices, it is necessary as far as possible to deal with the objective situation: To do all that can be done to give them an even break and to protect them from harsh treatment. But it is necessary also to take account of the subjective situation, and there are two aspects of this. First, the more a child can be helped, within the privacy of his own personal life, and within the intimacy of his own immediate family and social group, to develop healthy attitudes toward himself, the more protection he probably will have against the cruelty and unfairness that may be visited upon him by people from outside his own group. Second, the more any child thus can be helped to acquire healthy attitudes toward himself, the less likely he is to become the victim of unhealthy attitudes toward others, such as prevail when there is prejudice. In other words, the more fully members of the majority and the minority, the "ins" and the "outs," and the children of "high" and those of

"low" status in the community acquire (in their own self-development) an integrity of their own, the less likely they are to carry further the old prejudices that already exist in the weary and hate-ridden world in which they live and the less need they will have to create a new set of prejudices of their own.

CHAPTER NINE

Emotional Development (I)

Introduction. Affection. Joy. Humor. Sex

Emotional experiences flow in a continuous stream through all phases and facets of a child's development. Fears and resentments, joys and sorrows, and the experience of being lonely, proud, ashamed, bored, pleased, annoyed, or contented are interwoven with the details of a child's daily existence. Emotion is involved in the whole business of living. For this reason a discussion of emotion runs through all chapters of this book. Yet there are features of emotional experience that need to be singled out for attention, and that is the reason for this chapter and the two that follow.

Emotion means a state of being "moved." Outwardly it may show itself in pallor, clenched fists, and cringing and agitated behavior. Inwardly it includes three qualities of experience which sometimes are distinctly clear and sometimes very blurred. First, it involves feeling, such as one experiences when one feels afraid or angry or jubilant or just uneasy or vaguely depressed. Second, it includes an impulse toward some kind of action, such as a definite impulse to hit, or to run, or to seek and prolong a pleasurable event, or an aimless impulse to be on the go. Third, on the subjective side emotion also involves (although often not at all in clear detail) awareness or perception of what it is, or what it might be, that produces these impulses and feelings.

As stated, these feelings and impulses and the intellectual perception of what is afoot may be well defined in one's experience or may be buried in vague states of uneasiness, irritation, or depression. Many of the most common emotional conditions, such as when a child is

anxious, or is eager to do or to know, or is ashamed of himself, or uneasy about the future, are not clearly defined in his awareness even though they involve some kind of feeling and some kind of tendency to move with, or toward, or against.

Early Emotional Reactions

In the chapter on the child at birth we noted that behavior at the newborn level that seems to be emotional is not very precise or well differentiated. We noted also that the child is undisturbed by many conditions that will arouse him as he matures.[1] As a child grows older his expressions of emotion become more clearly distinguishable. An indication of how this differentiation proceeds is provided in a study by Goodenough (1931a), who found that adult judges showed more accuracy than could be expected by chance when asked to identify pictures taken of a ten-month-old child when he was exposed to conditions that usually arouse fear, astonishment, satisfaction, anger, and the like. The sounds an infant uses to express emotion also become more definite after a time. At the age of one month, he will give different cries for hunger, pain, and discomfort, according to Gesell (1928). Soon thereafter he will smile at the approach of a person and give vocal expression to apparent feelings of pleasure.

The Role of Needs, Drives, Motives, Goals

Whether or not a child's feelings will be aroused by a given happening will depend upon what he has at stake. Feelings are likely to be aroused by anything that furthers or threatens his motives and plans, anything that blocks or promotes activities he has initiated, or anything that helps or hinders his hopes and aspirations. As a result, the same external event has varied effects. To a child who is

[1] Bonsfield and Orbison (1952) have presented a theory of emotional development which builds on the assumption that the infant's emotional capacities are limited because his cortex is undeveloped and that he also is relatively lacking in the endocrine products which sustain some of the physiological responses to stress.

poised to go to a picnic, a rainstorm may be a tragedy that makes him rant and weep while the same rain brings joy to another child whose flower patch is suffering from drought.

To list all the drives that make a person subject to emotion would be an impossible undertaking, for while some are "original," common to all persons, and quite obvious (such as the drive to obtain food when hungry), others have been influenced by learning and past experience and may be unique (such as a certain child's desire to collect the stubs of theater tickets). Yet it is possible to illustrate certain groups or classes of motives that come into play.

Some Needs and Drives

First there are drives associated with primary needs of the organism, such as the need for food, for drink, for air, for maintaining protection against heat or cold, for protection of bodily tissue against damage through bruises and punctures, the need for rest and sleep, and the need for carrying on the functions of the body. Connected with many of these needs are cravings of varying intensity, such as a thirsty person's craving for water.

In addition, human beings, in common with other creatures, have activity drives, impulses to use their energies. These drives are less sharply defined than the drives mentioned above, and they are more varied and subject to modification during the course of growth and as a result of experience. In this group fall such examples as the child's drive to creep and walk, his curiosity, his impulse to venture into the untried and the unknown, to be on the go, and to enter into a variety of experiences.

Another category of motives that come into play in the growing child are those involved in his relations with other people. At an early age he desires the company of his elders. Eventually he seeks to belong, to be accepted, to have a place, and to have status with his own age group. These desires vary with different children, and are influenced by learning and experience.

In addition to these drives there are almost countless forms and varieties of motivation of a more optional character that are de-

scribed by such everyday terms as interests, wishes and desires, wants and hopes. These wants and wishes are influenced by the cultural environment. In connection with all of these it is possible for the person to meet helps and hindrances, to succeed or to fail; and all such possibilities add to the total of circumstances that may arouse him emotionally.

Beginnings of Pride and Shame

Among the drives that sooner or later come prominently into play in the child's emotional life are those connected with his view of himself, his regard for his rights, his efforts to maintain and protect his picture of himself and his self-respect, his efforts to fend off or to cope with experiences that threaten his self-esteem, his pride, and the position he would like to maintain in living up to a concept of who he is, what he is, and what he should be and do. Signs of emotion connected with the child's process of self-discovery and with the process of maintaining and protecting his emerging self appear quite early in life in manifestations of pride and shame. How soon after birth a child can begin to have the experience of being humiliated by others or shamed in his own regard we do not know. Neither do we know when he can begin to experience pride—"positive self-feeling"—or take delight in the discovery of some capacity within himself, or in a new triumph as he tests his powers and explores the boundaries of his being. It is possible, however, that during the first weeks the infant experiences the inchoate beginnings of what we, as older persons, feel as shame or pride, or intense exhilaration or anger or melancholy, such as occur when our expectations are realized or shattered or when we are ridiculed or are rejected by someone whose good will we desperately seek, or fail to measure up to demands we have placed upon ourselves. By the time infants are about six months old it seems possible to detect signs of hurt feeling (although the interpretation may be wrong), as when a baby's face puckers, and he draws slightly away and weeps quietly when he has been rebuffed, say, by an abrupt withdrawal of a hand that he has touched. Unfortunately little systematic study has been made

of the development of attitudes which in everyday life we speak of as pride and shame.

Concealment and Suppression of Feeling

In early infancy, as we have noted, a child's expression of emotion is at first rather aimless and not very precise, and then as he grows older he is able to show his emotion in more clearly defined ways. But from early childhood he is under pressure also to blunt and conceal expressions of emotion. From his parents and brothers and sisters, and later from others there are reminders that he should calm down, not get angry, not be afraid. He is told, in effect, not only to conceal his emotion but even to avoid having emotion: There is "nothing to be afraid of"; "you better not get sore at me"; "there is nothing to cry about or to laugh at."

From an early age emotion is driven underground. The child learns to disguise his feelings, or to hide them, or to express them in devious ways. Many children learn also to disapprove of themselves for having intense feelings. But they cannot rid themselves of their inborn (and essential) tendencies to be frightened, angry, grief-stricken, and ashamed.

As a result many children from an early age are involved in a conflict within themselves, a struggle arising from the fact that they cannot help becoming angry, yet they should not show anger or feel it; they cannot help being frightened, yet they should not be sissies or "fraidy" cats. They are under pressure to play false with their feelings, and a child does this when he is seething with resentment against his elders, but, instead of showing this directly, he breaks bottles on a public highway as though it were "just for fun"; then, too, he fears ridicule or censure when he is uncertain in class but refuses to answer, preferring to be called stubborn or stupid, rather than to face contempt as one who is afraid. Children are under pressure also to conceal their emotions from themselves, to play false with themselves. This happens, for example, when children and adults succeed so well in explaining away their fear and anxiety that they no longer clearly recognize that they are anxious and afraid.

We shall have more to say on this matter in later sections. For the moment, we shall only consider quite briefly what sometimes happens in connection with the concealment of crying and efforts to snuff out the impulse to weep.

"*Don't cry.*" Pressure on children to play false with their feelings and thus in time to play false with themselves appears noticeably in connection with feelings springing from grief, sorrow, pain, or anxiety so acute that the individual feels helpless and feels like breaking into tears.

It is natural and healthy for a child to cry when hurt, to sob when in distress, to weep when lonely, to shriek with fright, and to scream in anger if he is helpless in his rage and there is nothing else in his helplessness he can do.

But many adults and many older children recoil when they see another person cry. Some become anxious at the sight of tears and the sound of weeping. So from an early age, quite apart from their own natural course of development (which leads to changes in the use of crying), children are constrained not to let their feelings show by crying. Along with this, they also are under duress to conceal feelings that might cause them to cry, and to guard against such feelings.

The writer recalls a newspaper story about a baby who fell out of a window several stories high and when the mother rushed out to pick up the child, mercifully alive and crying lustily, she said: "Don't cry." As though a child should fall at least from a skyscraper to earn the right to cry! Actually, when the mother said, "Don't cry," she was not giving a command but expressing her own agitation, yet it is noteworthy that it took this form. From the child's point of view such an admonition might sound as though there is something bad about crying.

Often when people say to children, "Don't cry," the reason is that crying arouses in them buried recollections and banished impulses, going back to the time when they would like to have cried in anger, or screamed with fear, or wept out of a feeling of hurt or loneliness, helplessness, and despair. It is hard for the older person to endure a reminder of these old and buried hurts, and the harder it is the

more anxious he will be when another cries. He becomes anxious about the rearousal of old, forgotten hurts even if it is a mere infant who is crying. So he hastens to say, "Don't cry."

When a child is systematically asked to keep from crying he is being asked to bury something of himself, to conceal rather than to express and to face his impulses and his feelings at the moment of their occurrence. To that extent we may be asking him to avoid rather than to face the reality of his emotions. And thereby we may be encouraging him to go astray in his development. If an older person wishes to understand a child's emotions and to help him to understand himself and to face the issues of his life, it is necessary to face feelings rather than to falsify them or run away from them. But to do this requires courage—courage to look beneath the polite surface. It also requires humility, for the person who has the courage to look at emotion soon realizes that there are vast reaches within his own emotional life that he does not understand.

It is in the sphere of emotion more than in any other area of child psychology that a process of studying children and a process of drawing upon and sharpening one's understanding of one's own emotions must go hand in hand if anything is to be learned. In this area, too, it may be observed that the closer a person comes to understanding the child, the nearer he is to himself, and the closer he is to understanding himself, the nearer he is to the child, because the emotions of an adult when he is frightened or angry or joyful or filled with grief contain much the same primitive substance as the child's fear, anger, sorrow, and joy.

Developmental Changes in Susceptibility to Emotion

The development of emotions during infancy and childhood is closely interwoven with other aspects of development. As a child's senses become more acute, as his capacities for discrimination and perception mature, and as he moves forward in all aspects of his development, the range of events which arouse emotion grows wider and wider. With the growth of the child's understanding and imagination the things that affect him emotionally become increasingly involved with symbols and fancies, with abstract plans and values.

Affection

We have already touched on the fact that children at an early age display a desire to receive and an impulse to bestow affection. There are differences in interpretation concerning the origin of love. There is the view that a child's need for affection is an outgrowth of his helplessness. Again there is the view that the child's love for a person or thing is a conditioned response: He loves his mother because he loves his milk. This latter interpretation, which implies that a child's affection for other persons and things may be merely an extension of his own "selfish" concerns, seems to square with some manifestations of affection that can be observed in everyday life. But this is only a part of the story. Although learning is involved in determining whom and what a child will be fond of, quite as important is the fact that the child has the potentiality for fondness and concern for persons and things. This potentiality is a feature of his original nature.

The child has this capacity not only for affection toward intimates who minister to his more or less self-centered desires, but also for affection of a more spontaneous character. The issue as to whether all concern for others is an extension of concern for self is not a crucial one. A thoroughgoing distinction between self-love and altruistic love cannot be made; concern for self and concern for others are not separate but go together. If a child does not love himself but feels contempt toward himself, feels unworthy, guilty, and deserving of punishment, he cannot be wholehearted in his affection for others. He may be compliant, obedient, eager to curry favor, ardent in his search for praise and approval, but this is not affection.[2]

Expressions of affection. The first expressions of affection that meet the eye after a child is born are not those which the baby displays

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[2] The idea that one should love one's neighbor as oneself expresses not simply a command but a condition of mental health. The position that love of others and love of self, acceptance of others and acceptance of self, go together (or don't go at all) has been presented by such writers as Fromm (1947) and Rogers (1942b) and his associates (see, e.g., Sheerer, 1948), and it is implicit throughout the works of Horney and Sullivan which are referred to elsewhere in this chapter.

toward others, but those which others display toward him. As noted in an earlier chapter, the child's birth touches off affectionate impulses in the healthy mother; and the father, although he is more of a bystander, is also deeply affected. Such a response does not necessarily denote a parental "instinct," but the important thing is the readiness with which there is displayed "responsiveness to the looks, gestures and cries" of the infant, an impulse to perform comforting acts in response to "childish signs of pain, grief and misery," and in time, to find a delight in "childish gurglings, smiles and affectionate gestures." [3]

An infant very early in life welcomes the experience of being held and fondled, and as noted in a previous chapter, he soon actively repays human contacts by smiling and laughing at the approach of his mother and by showing affection in other playful ways. In due time, also, he becomes attached to children of his own age. Under normal circumstances his friendly responses to other children in time outnumber unfriendly acts, even though he may at times display an ample amount of aggression and resistance. In time he forms attachments to many persons and things. He shows acute concern, sometimes a high degree of terror, when it appears that harm is befalling a member of his circle.

Likewise, after the age of a year or so, a child is likely to form a strong attachment to inanimate objects and animals—a certain blanket, a cup, a spoon, a little kit, an old sweater. He may treasure an old teddy bear, a tattered doll, or an old box with a devotion stronger than is ever won by newer and costlier possessions. His affections may embrace the family dog and cat and other animals, extending in time to equipment about the home; even the old family automobile may find a place in his heart, just as did the old oaken bucket of an earlier generation, and just as did the old gray mare when she was what she used to be.

The course of the normal child's affections for his brothers and

[3] This is a partial rephrasing of a description by Thorndike, in 1913, of the maternal instinct. The account also includes the following: "To a woman who has given birth to a child, a baby to see, to hold, and suckle is perhaps the most potent satisfaction that life can offer; its loss, the cause of the saddest yearning."

sisters has not been studied systematically from the developmental point of view over a period of months and years, but we know enough about them to realize that the route of brotherly and sisterly love is often stony and stormy.

Two children who seem to argue a great deal in their everyday relations may have more affection for each other than another pair who get along quite peaceably by holding aloof. Two children who fight vigorously at home may unite loyally against aggression by an outsider, and either one may, on occasion, go to great lengths of devotion. In healthy, alert children, friction and occasional hostility are normal phenomena. Their presence does not denote genuine incompatibility. Nor does the fact that such children at one time fight and at another time go out of their way to help each other or grieve at each other's hurts and misfortunes mean that the children are chronically torn between conflicting feelings of hatred and love. To be sure, such ambivalent attitudes may exist in some cases, just as the balance between affection and hostility may vary considerably in different sibships. The home environment may produce strong hatreds, just as it may produce strong ties of affection. But the presence of affection does not mean that anger is banished. As a matter of fact, one of the surest marks of lack of genuine affection, or at least of doubt as to whether it exists, is a need always to *act* affectionate, always to behave in a gingerly fashion for fear of hurting uncertain feelings. On the other hand, where there is a well-established relationship of affection there will be greater emotional freedom in other ways: The person who loves and the one who is loved will be free to express his own feelings, to "speak his mind." He will not deliberately hurt the other, but neither will he feel it necessary always to walk about on tiptoes, fearful that by some misstep he will give offense.

In a large family, varying degrees of affection are likely to develop between the different members even when all get along fairly well. Thus, an older child may "adopt" one of the younger ones as his or her special favorite, or two children near each other in age may become especially loyal to each other, share candy and other goods, and never tattle about each other. Special loyalties of this kind may persist over

a period of several years and may continue into adult life; but by reason of changing interests and other factors, a shift in such alignments may occur in adult years.

The bearing of affection on development and adjustment. A child's intellectual and emotional development is likely to proceed better in a home situation that can provide close companionship than in an institution where many children are in the care of a few adults and where it is not possible for children to receive as much personal attention as in the home (Goldfarb, 1943). Striking findings on this point are reported in a study by Skeels and others (1938) which, though not dealing specifically with the matter of affection, show impressively the manner in which children in an orphanage where human contacts have been limited and restricted were more on the defensive, less free to avail themselves of the friendly attention of an adult, than children who have learned to count upon such adult companionship as is enjoyed by the normal child. A study by Brodbeck and Irwin (1946) shows that even during the first six months of life infants in an orphanage made fewer and less varied speech sounds than did children of high and of low socioeconomic status who were being brought up by the parents in their own homes. Spitz (1950) has described a kind of anxiety taking the form of depression and accompanied by tears, screaming, tremblings and other signs of panic in babies separated from their mothers during the second half of the first year. Spitz (1949b) also has discussed emotional impoverishment, which may be expressed in apathy or hyperexcitability, as a consequence of lack of emotional interchange between the child and its mother.

A study by Goldfarb (1943) indicates that children in an institution where the usual intimacy of affection between parent and child does not exist may be penalized severely in their development. There are findings which indicate that a person who has not had affection may suffer from a lack of the kind of intellectual freedom and enterprise that is involved in creative thinking, arriving at large conceptions and broad abstractions.[4] According to this line of

[4] For a discussion bearing on this, see Goldfarb (1943), and for a discussion of some of the underlying theory, see also Goldstein and Scheerer (1941).

thought, a person who has not been accepted emotionally may be more constricted in his mental operations, more tied to the literal, the exact data, the detailed facts. The ability to think big thoughts is not solely a product of rigorous intellectual discipline. It involves a kind of emotional freedom, coupled with intellectual acuity, that makes it possible for a person to cut loose from the detail and move into a sphere of thought where details are seen in a larger synthesis. On the other hand, the less freedom there is, the more tendency there will be to stay with the given facts—to see the trees but not the forest.

Findings in some studies also indicate that the degree of cordiality that existed between a person and his parents when he was a child will have a bearing on a child's moral development (Zucker, 1943) and on his attitudes—his tendency, for example, to be conservative or radical as a young adult (Stagner, 1944; Stagner and Drought, 1935). Psychiatric case studies contain many accounts of ways in which hidden or partly concealed attitudes of hostility toward a parent may color a person's attitudes and influence his prejudices and fears.

The importance to the child of security in his accustomed ties and contacts with adults has been emphasized in several studies dealing with the effects of wartime happenings, notably evacuation, upon the behavior of children (see, e.g., Issacs, *et al.*, 1941; and Burt, 1941). It appeared that some children were emotionally more affected by the fact of leaving home and living in a new place with strange people than by being exposed to air raids at home.

The fact that children thrive best in an atmosphere of affection is not, of course, surprising. When the parent genuinely likes his child and enjoys him as a companion, there will be more give and take, more mutual participation in common activities, less unresolved friction, less need for concealment and evasion, more occasion to venture into new experiences, and more protection against damaging shocks. The child who can count on the affection of his elders need not spend his energies in playing safe. He has freedom to try himself out, to venture, to make mistakes. He will be spared from many fears, especially fear of ridicule, punishment, and harsh treat-

ment for being what he is. He will be freer to be himself, to grow at his own rate. He will not be called upon to bribe or buy his way into the good graces of his parents. When there is an attitude of affection a child is loved for his own sake, whether or not he happens to get his first tooth sooner than the baby next door, or to get the best marks on his report card.

On the other hand, the child who cannot count on such affection is under necessity from an early age to defend himself, to prove himself, and to protect himself, and his hardest struggle of all will be to develop self-esteem and confidence in himself.

"*Rejection and overprotection.*" The term "rejection" and the label "rejected child" have been used to denote the condition of a child who is not loved by a parent (or parent substitute). The term "overprotection" has been used to designate a parental attitude involving excessive contact and mothering.

Among the more extreme signs or symptoms that a parent is rejecting his child, as described by one writer (Fitz-Simons, 1935), are such items as evicting or deserting the child; putting him into an institution (reform school, military school, and so on) in order to discipline him or to avoid being bothered by him; seeing mainly the child's faults; and using very severe punishment. Other items signifying rejection, according to this account, are frequent criticism, threats to evict, locking the child up (in closet or basement), or deliberately frightening him. Still other signs of rejection, rated as somewhat less severe, include nagging, spanking, paying no attention to the child, failing to provide him with money or toys or advantages, comparing the child unfavorably with others, making no effort to seek ways of improving his condition by enlisting the services of doctors, teachers, and so on. It is not implied that each one of these milder items alone marks the parent as a "rejecting" parent.[5]

There are many other ways of rejecting a child. One can reject a child by giving in to him and giving him almost every gift he desires in order to quiet him and be rid of him. One can reject a child by

[5] For other studies dealing with the effects of parental attitudes, including rejection, nonrejection, and overprotection see Symonds (1938) and a series of studies initiated by D. Levy and published in several numbers of the journal, *Smith College Studies in Social Work*, during the years 1930 and 1931.

promising to love him only if he is good or if he keeps clean or does superior work. One can reject him by not caring enough to detect signs that he is afraid or is being mistreated at school. But one can reject him also by being "soft" and overly lenient, for to overindulge a child may mean that one does not care enough for him to exert oneself in his behalf.

Such behavior as the following has been regarded as a sign of an "overprotecting" attitude, as contrasted with a "rejecting" attitude: Excessive contact of mother with child (sleeping in same bed, continually keeping within sight, and so on); prolongation of infantile care; lack or excess of parental control; indulging child (cannot refuse requests); caring for child's physical needs to an unusual degree.

D. Levy (1943) has advanced the hypothesis that a mother's tendency to reject or to overprotect may be due to such factors as a long period of anticipation or frustration prior to having a child (due, for example, to miscarriages or death of other infants) or unsatisfactory marital relationship and hunger for affection. According to Levy, an attitude of overprotection might also be influenced by conditions in the child (such as a severe illness) that threatened his life.

Actually, any condition in a parent's life which has the effect of making him anxious, withdrawn within himself, and unable freely to feel and to express emotion will interfere with his ability to love wholeheartedly his child. A tendency to overprotect or reject a child is likely to be associated with other signs of emotional poverty. If a husband or wife are unable to love their child it is questionable whether they have the capacity for genuinely loving each other, although they may put on a good show. If a parent loves one of his children and says he not only does not prefer but actually cannot love the other, it is quite likely that his "love" for the first child is dubious: Perhaps he loves the first one from ambition or false pride or self-pity, rather than from a genuine affection. A person may have differing preferences in his feelings for one person as compared with others, but it is doubtful that a parent or teacher or any other parent surrogate can genuinely reject any one child unless there is a serious

limit or lack in his ability to love any human being, including himself.

Great caution should be used in applying the concepts of parental rejection and overprotection. Parents may be equally devoted to their children and yet differ in their notions as to methods of child rearing and in their ideas as to how "strict" or "lenient" a parent should be. Moreover, in a normal home there are times when a fond but tired parent would like nothing better than to have someone take his children off his hands for a while.[6] Even lovers become weary. Apart from this, the concept should not be applied as an epithet or accusation. Actually, a parent who lacks fondness for his child is a pitiable creature. He is subject to social pressure to bear the labors and responsibilities of a parent, and when parenthood is not a labor of love it is labor indeed. It is not only a labor, but a trial to him or to her, for a parent in our culture cannot be unloving in his attitude toward his child without feeling guilty and full of self-reproach. But even more tragic are the prior conditions. A parent cannot be unloving toward his child unless his own life has been blighted with rejection and burdened with pain. A rejected child is an unhappy child, but his misery is no greater than that of a rejecting parent.

As is only to be expected, a "rejected" child faces many problems and difficulties. A little child who does not receive the consideration and friendliness which goes with parental affection is exposed to many hurts and dangers and he is weak, helpless, friendless, and alone. He may be left hungry, neglected, wet, and uncomfortable for long periods of time. He may be treated in a manner that is mechanically quite correct and not openly harsh or unkind, but day to day in infancy, week by week as he passes into early childhood there are innumerable occasions when the difference between affection and lack of it assumes vast importance. The loving parent is alert to perceive a hurt, a need, a wish, a gesture of friendliness, the warm tight clutch of little fingers, the lingering gaze, the morning smile,

[6] The fact that parents and children, like husbands and wives, view each other with varying degrees of enthusiasm from time to time has been brought out in a very readable book by J. Levy and Monroe (1938).

the desperate eagerness to gobble the first mouthfuls of food, the satisfaction derived from a squeeze, the joy gushing through belly laughs during horseplay, and countless other expressions of the child's humanity. But if there is no affection, such matters are not likely to be noticed, or to be relished if they are noticed, for the adult is preoccupied with other things or is anxiously absorbed in himself.

Now assume not simply that the child is ignored but actively abused, as sometimes happens to an unloved child even in early infancy, or assume that the adult does not stand vigilantly as a buffer between the growing child and harsh elements in his environment—older children or adults who have a cruel streak or harassed teachers who can spare a bit of friendliness only for the meekest or most successful pupils in their classes—and one can see how large is the burden the child must bear alone. From an early age he is driven back upon himself and his own defenses. Having received no love he has difficulty in learning how to bestow it. Having received no affection, he learns not to expect it; he learns to expect nothing, or to expect the worst, and if he learns that, his guard is up against all who come. But the more he guards himself, the more he also erects a barrier between himself and those who actually would befriend him. So there is a rift between him and others. The easy flow of communication and fellow-feeling which is so important a feature of healthy, interpersonal relationships is cut off. But more—there is a rift also in him: For if no one esteems him it is hard for him to learn to esteem himself.

Other practical implications. It is likely that a systematic study of affectionate behavior in children would show that children have greater capacity for affection and concern for others than usually is assumed in our present ways of dealing with them. From the point of view of larger adult affairs, it is likely that a different emphasis in the education of children at home and at school might utilize many resources that now are ignored. In training and selecting teachers, for example, little attention has been given to the teacher's capacity for affection or to the conditions which block this capacity and that might be remedied by psychotherapy.

A child's experience of affection in the home environment will have

an important influence upon the development and expression of his own affection for others. As the normal child grows older, he acquires many loyalties outside the home. He will be handicapped if his attachment to one or both parents is so precarious and involves so much dependence as to prevent him from acquiring a wholehearted interest in other people. A child who is thus bound is likely sooner or later to face such difficulties as excessive jealousy, homesickness, and difficulty in winning full acceptance by others. He will also have fewer resources for meeting the shock that comes with the loss of a loved one. The more genuine and spontaneous the affectionate relationship between a child and his parents is, the greater will be his ability to develop affection for others and the more able he will be to sustain the loss of a loved one, even if, for a time, such a loss grieves him and even frightens him. Lack of experience of close ties in the home and lack of experience from an early age in expressing feelings of affection likewise will be a handicap in later life, especially when the individual reaches the age of readiness for courtship, marriage, and family life, because loving takes learning, just as does almost everything else.

The degree of a child's attachment to his parents and his expression of his attachment will vary in different circumstances. The youngster may, for example, prefer to romp and play with his father but demand the company of his mother when he is sick or when he awakens from a bad dream.

Among children, as among adults, one sometimes finds individuals who are very strongly attached to the parent of the opposite sex. A boy's devotion to his mother, and a girl's to her father, may be so influential that the characteristics of the favored parent serve as a standard or model when the youngster, in adult life, looks for a husband or wife (or carefully refrains from looking).

A condition in which a child has an emotional and erotic preference for the parent of the opposite sex is involved in the well-known Oedipus complex or Oedipus situation, as was noted in another context in Chapter Four. Freud (1933) advanced the theory that all children go through such an Oedipal phase, as though it were given in the nature of things, and according to this theory one of the

important hurdles of childhood is to resolve this complex and the feelings of jealousy, hostility, anxiety, and guilt that to a greater or lesser degree it is bound to entail. According to less orthodox views, now widely prevalent in psychoanalysis (where Freud originated the theory of the Oedipus complex) and in psychology and anthropology, this kind of "Oedipal" attachment to the parent of the opposite sex may occur, and perhaps does often occur, but it is not to be regarded as typical or inevitable.

A matter of deeper and more pervasive psychological significance is the relationship between the young child and the people (usually his parents) who have his physical and psychological well-being in their hands. This relationship (whether or not it happens to be tinged with elements of the so-called Oedipus situation) is of great significance in the child's early development and has a crucial influence not only on the nature of his relationships with others but also on his developing ideas and attitudes concerning himself. According to this concept, the nature of this relationship can best be described in such terms as affection as contrasted with rejection, love as distinguished from lack of love, spontaneity and genuine feeling as contrasted with rigidity and compulsiveness, emotional closeness and intimacy as distinguished from emotional detachment. If now there is a bit of sex, an extra erotic fillip, in the relationship between mother and son, and between father and daughter, that certainly would also be an important matter when it occurs, but as compared with the larger relationship between the child and the most significant people in his early environment it would be an additional feature rather than the essential feature.

Pleasure and Boredom in Childhood

Satisfying, pleasure-producing conditions range from stimulation of specific sense organs to conditions involving the free flow of activity. Whatever may be the underlying cause, pleasure often is associated with sheer activity. The infant coos and gurgles, exercises his voice, kicks, manipulates convenient objects with his hands, ventures into

creeping and crawling and walking, and, as time passes, enters into a great variety of activities. Whether there is as much pleasure in his activity as his movements seem to indicate, we have no way of telling, but it appears that, like the healthy puppy who frisks playfully even though no fleas are biting him, the child draws satisfaction from being active on his own accord. There seems to be a kind of spontaneity in much of a young child's activity that flows from the total economy of his organism as distinguished from the press of demands from the external environment. The child's energies are not simply devoted to the job of maintaining a serene state of equilibrium. From infancy he is on the go. He ventures, he takes risks, he gets into difficult situations, he often welcomes excitement, he "plays" with anger in the sense that he tries the patience of his parents or of a playmate, he "plays" with fear in the sense that he returns on his own accord to situations that are somewhat frightening to him, but not completely overwhelming. In many ways a child asks for trouble, so to speak, and the more secure he is the more he is likely to feel free to take a chance, to laugh and shout with glee as when he successfully scales a hurdle, overcomes a difficulty, and gets out of a tight spot.

Among the intense pleasures a child can experience as he grows older are those connected with the free exercise of his curiosity and the development of such talents as he may have in art, music, and various skills.

Prominent among the joy-producing experiences in his life are those which give him a new perception of himself, a new discovery concerning his ability, a broadened view as to his capacity to "take it," to stand up to a difficulty, to handle a troublesome problem in a realistic way. Many children experience such satisfactions in the process of overcoming their fears, for in this process they not only gain freedom from a threat but also a greater realization of their strength.

Some of the most exhilarating experiences of jubilation come with a torrent of heightened self-regard when a child has finally succeeded in solving a difficult problem or when he has experienced a dramatic

TABLE XIII[7]

FREQUENCY OF RESPONSES IN VARIOUS CATEGORIES WHEN CHILDREN DESCRIBED "ONE OF THE HAPPIEST DAYS OF MY LIFE"

(The values represent percentage of children giving one or more responses in each category.)

	Grades 1–3 Ages 6–9		*Grades 4–6 Ages 9–12*		*Grades 7–9 Ages 12–15*		*Grades 10–12 Ages 15–18*	
Number:	Boys 363	Girls 331	Boys 309	Girls 343	Boys 282	Girls 290	Boys 159	Girls 171
Receiving or having or otherwise enjoying material things, gifts, toys, money, living quarters	8.7	8.1	10.4	7.2	10.1	4.5	5.6	3.1
Holidays, festive occasions, birthdays, Christmas, etc.	39.1	40.5	32.4	38.9	6.3	10.1	0.6	6.5
Sports, games, hiking, hunting, bicycling, etc.	10.2	6.4	9.1	5.5	12.4	5.8	13.0	7.3
Going to miscellaneous places of recreation, going to camps, traveling, going to resorts, to parks	9.6	9.0	10.1	11.4	9.7	13.9	30.2	6.9
Self-improvement, success in school, educational opportunity, evidence of vocational competence, getting a job	2.4	2.3	2.9	1.9	4.8	4.1	13.6	15.9
Happenings connected with school, including last day, end of school, going to a certain school	3.6	3.4	5.4	4.3	14.0	11.1	7.0	5.4
Relationship with people (explicitly described), companionship, being with certain friend, return home of relatives, etc.	7.7	15.9	8.0	15.8	10.5	22.0	8.7	19.9
Residing in, moving to, a certain city or community	1.3	1.0	0.8	2.9	0.9	2.9	1.4	5.0
Benefits befalling others, or mankind in general, including end of war	0.6	0.8	3.2	2.8	2.2	2.6	7.9	9.7

[7] Reproduced, by permission, from A. T. Jersild and R. J. Tasch, *Children's Interests*. Bureau of Publications, Teachers College, Columbia University, 1949. The table omits several categories, including hobbies, movies and radio programs, art activities, and so forth, mentioned by only small percentages of children.

enhancement of his self-esteem, such as being chosen for a part at school, or selected as a member of a team in the face of doubts as to whether he is worthy enough or well liked enough to be chosen.

If an inventory and count were made, it is likely that the pleasures arising during childhood in the process of self-discovery and self-realization would fill a tremendous volume.

A summary of some of the joys of childhood as expressed in the terms children themselves use, or broad categories based on such terms, appears in Table XIII. It can be observed that younger children expressed their joys frequently in the language of gifts, holidays and festivities, games and sports, and visits or special contacts with people. This language reveals more concerning the objective nature of the event that was enjoyable than concerning the subjective meaning of this event, for often it appeared (but was not literally stated) that the joy stemmed not from the gift alone (or the visit, and the like), but from what the affection, mutuality, or acceptance which a gift betokened, or from a visit from an aunt or the privilege of joining with others in a certain game.

Boredom. The term "boredom" covers a variety of experiences that are "negative" in the sense that the individual is marking time with nothing stimulating or challenging to absorb his attention. Boredom involves a complete absence of "activity pleasure" as described above. Although boredom in one form or another is a very common experience, it has received little attention in psychological research. In everyday speech boredom is revealed by such expressions as being "fed up"; "nothing ever happens around here." The term "tired" often denotes boredom rather than fatigue, and even the term "pain" often has this connotation, especially if the pain is located, euphemistically, in the neck.

A study of boredom would no doubt reveal that much of the mischievousness and misbehavior of children springs from a desire for something to happen. Children will even court the danger of severe punishment in order to stir up some "excitement." Similarly, mishaps and minor tragedies may be welcomed as a break in the monotony of life, as when a child dances with delight when the family car is stuck in the snow or when he learns that a bat has got

into Grandma's bedroom, or a beetle has crept into the bosom of Auntie's blouse. Many adults also, of course, go to great lengths to relieve boredom. Boredom sometimes is a precursor of anger, as when a child is not allowed simply to be inattentive or to leave but is forced to listen to long lectures or to stay at the table until others are finished.

Much of children's boredom centers in the school. It can especially be noted in the average classroom where much of the time of children is spent in idling. For every child in school who is dissatisfied because the work is too hard there probably are some who are bored because the work is not challenging. Such boredom can easily be mistaken for surliness. Thus, a girl who had seemed apathetic and something of a "fringer" during the latter part of her stay in nursery school and kindergarten blossomed forth with new interest and vitality when she moved on to the first grade and became absorbed in reading and other school projects.

It would be impossible, of course, to arrange matters so that everything which occupies a child's time is so scaled and varied as to continue to challenge his growing abilities, since many activities of daily life, both during childhood and adult years, consist of chores one must learn to take in one's stride. Failure to adjust to this fact may become a source of much dissatisfaction, but the situation is even worse when everything in the day's activities becomes a matter of uninteresting routine. This problem is likely to be more acute in adult years, after the individual is pretty well established and finds that his daily round of duties no longer challenges his powers. Regardless of the importance of his duties in the larger scheme of things, he may find them boring; and there may develop, as happens with many adults, a sense of futility accompanied by a search for remedies that will either dull the senses or excite them. Much worse, of course, than the condition of boredom in an adult who has an occupation is the plight of an able-bodied person who has no occupation.

Chronic and pervasive boredom of the sort sometimes found in adults is not likely to occur in a child, for so much yet lies ahead of him and he is constantly meeting new experiences. The frontiers of

his world are still wide open. But the child and his activities have a definite bearing upon the adult problem, because the resources for satisfaction through activity which an adult possesses in his thirties and beyond are much influenced by his training and experiences as a child. Many adult hobbies and avocations first began to flower early in childhood then perhaps they may have been dormant for a time through adolescence and youth, only to grow again in later years. Indeed, activities and skills which a child exercised only because he had to may, in later years, be revived with enthusiasm; e.g., when a person who worked in the garden reluctantly as a child, later as an adult, picks up his spade and hoe and goes joyfully to work.

A very important aspect of boredom which is most likely to manifest itself at the adult level but which is an outgrowth, at least in part, of the adult's childhood and youth, is the boredom a person feels with reference to himself. He does not like to be alone with himself. He becomes restless when left with his own thoughts. He seeks distraction, excitement, work, play, anything, in preference to his own company. Perhaps we should not call this boredom, although it often goes by that name. Another way of putting it is that a person so afflicted feels "the itch," a constant urge to "go places and do things," rather than just "hang around." Such a person is the opposite of the god who is content to sit through eternity in solemn contemplation of his navel. A person who bores easily would probably soon get tired of contemplating his navel, and it is likely that other parts of his anatomy, generally viewed as more interesting than the navel, would not hold his attention very long.

When a person thus is bored with himself it may be a sign that he is not at ease with himself. It may mean that he is not at home with himself in that he does not like his own thoughts, or relish the memories that arise when he is unoccupied and that he is made uneasy by the reveries that automatically arise. Perhaps it is his conscience that troubles him—thoughts of deeds done or left undone, thoughts of self-condemnation, and feelings of self-contempt. When such is the case, and the person flees from himself into a whirl of activities that keep his attention on external things, it is likely that he is not just bored but anxious. This state appears also in children,

for often at school, for example, when a child is bored it is not because there is nothing for him to do; he may even be behind in his lessons. Rather, what seems to look like boredom and a lack of animation and interest may be the restlessness that goes with an inner conflict, a conflict arising between various impulses and needs and demands which the child places upon himself; a conflict between an impulse to work and a feeling of grievance against the teacher who is *making* him work against his will; a conflict between the need to exert effort and an expectation that such a person as he should be able to succeed without exerting much effort.[8]

Sympathy

In a literal definition of sympathy, the emphasis is on feeling—"suffering with" another, being affected by and being sensitive to another's plight or condition, and so on—as distinguished, say, from cooperation, where the literal emphasis is on doing rather than feeling.[9] As usually employed, however, sympathy denotes an expression of feeling ranging from meaningful silence to condolences, and from inept gestures to deeds that help to relieve another's distress. At the adult level the overt expression of sincere fellow-feeling may range from acts that bear the stamp of kindness to superficial gruffness, hilarity, and apparent unconcern. In the case of children, it likewise is sometimes difficult to detect sympathetic behavior, for although young children tend to express their emotions more freely than older persons, they are less able than adults to describe in words the nuances of their feelings or to formulate their impulses in terms of appropriate action.

In a study by Murphy (1937) it is pointed out that the more

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[8] Martin (1945) has discussed conflicts regarding the exertion of effort which beset a person who likes to think of himself as one who can succeed without half trying. The idea that it is flattering to oneself to be able to achieve without effort often appears when students claim they "hardly opened a book" in preparation for an examination.

[9] The topic of sympathy, from the point of view of its manifestations in social situations, is treated in Chapter Seven.

closely knit the structure of a society becomes, the more necessary it is for individuals to respond to the needs of others. She further points out that sympathy, when it is genuine and not merely a projection of anxiety or a way of dominating others is "intimately connected with all other responses of a friendly and constructive nature that are the foundation of a cooperative society." To this may be added the fact that through sympathy for others a person not only plays a friendly role with others, but he also realizes something in himself.

Compassion

This little section on compassion does not deal particularly with children but the writer wishes to include it for it represents, in his opinion, an essential and necessary part of any attempt to discuss emotional development and the concept of emotional maturity. It expresses a theory and a point of view and is not a review of empirical findings.

If we were to name any one emotional state or complex of feelings as representing the highest form of emotional maturity it would bear the name of compassion, for compassion draws to the fullest extent upon all of a person's resources for feeling. To be compassionate a person must be able to feel everything any human being can feel and then go one step further—to enter into a fellowship of feeling with others. To do this, a person must be able to realize the meaning and quality and intensity of his own emotions in such a manner that he can be compassionate with himself. For unless a person can be compassionate toward himself he will not be able to feel compassion for others.

Compassion involves a capacity for a certain degree of emotional identification with the totality of another's emotional state. Usually we think of sympathy and compassion as though they stood for a kind of pity, a sort of readiness to commiserate with another who is in a sad plight. But compassion means more than to grieve with those who weep; it means an ability to enter into the meaning of any of a vast range of emotions. To be compassionate with one who

is enraged one must draw sufficiently upon one's own capacity for anger, and one's past experience of rage, to appreciate the emotional meaning this rage has for the other person: The rack and grind and pain of it; the helpless, obsessive, compulsive, and bitter gall of it; the spite, vindictiveness, and hate in it; the passion to destroy something, or someone, or oneself, that goes with it. But to be compassionate one does not have to go the full length of this passion; if one does one is also a victim of rage, and there would then be no room for compassion. One must, however, be able to know the meaning of another's raw anger the way one can appreciate the raw pain another is suffering when iodine is applied to a naked wound.

To be compassionate with one who is frightened, one must similarly be able to draw upon one's resources for experiencing fear. To be compassionate with one who is happy, one must draw upon one's own experience of happiness, and for this reason it is harder for some people to be compassionate with those who are happy than with those who suffer. Unless a person has realized some of his potentialities for happiness he will have nothing on which to draw.

To be compassionate represents a high level of maturity, according to the concept here presented. To feel compassion for another—a person who is angry, let us say—one must have the courage and strength to face one's own capacity for hostility; to be compassionate with one who is anxious, one must be able to take cognizance of one's own experiences in the sphere of anxiety, for otherwise one's tendency will be to recoil, or retreat, or fight back when the other person's anxiety is expressed in such favorite guises as arrogance, intolerance, spitefulness, false pride, meanness, and self-righteousness. It is for this reason that we note above that one must have compassion with oneself in order to have compassion for others, for as long as a person blames himself for being anxious, or feels contempt for himself because he is subject to anger, or unworthy of being happy, or reproachful toward himself for feeling weak and unable to face all his problems alone, he will be so reminded of his own shortcomings and so preoccupied with self-reproach that he will not be capable of feeling in behalf of someone else.

Laughter and Humor

Children vary considerably with respect to the time when they first laugh and in their manner of laughing, but laughter typically appears quite early in life. The first appearance of laughter was noted at twelve weeks (by Washburn, 1929) when the experimenter bent over the child and made a chirruping sound. Among the stimuli used to provoke laughter were games of peekaboo, sudden reappearances from under the table, tickling, rhythmical hand clapping, and the like. Most effective in producing laughter was the "threatening-head" stimulus: While holding the child's hands, the experimenter shook her head playfully from side to side and then ducked rapidly, until her head came into contact with the center of the child's body, whence it was immediately withdrawn again. Laughter in response to this action appeared at sixteen weeks.

At the preschool level (Ding, *et al.*, 1932), laughter often occurs predominantly in connection with some form of motor activity. The young child seldom just sits and laughs (neither, for that matter, does an adult). Many of the conditions which have been proposed in theories of laughter in the case of adults were not confirmed by the behavior of children. It did not appear that such factors as derision, or feelings of superiority because of another's coming to grief, or vindictiveness played a prominent part in causing children's laughter. Laughter occurs most frequently in the young child when he is in the company of others (Kenderdine, 1931).

The child learns to use laughter in his social contacts with others. He is more likely to laugh when with others than when playing alone, more when with friends than with strangers; and he is also more likely to laugh at the antics of those whom he knows than at similar behavior in strangers. Among children as among adults laughter is often an expression of good will.

In an interesting study by Justin (1932), children aged three through six years were exposed to a number of situations that were designed to represent each of six prominent theories as to the cause of laughter, including such circumstances as surprise and defeated

expectation, superiority and degradation, incongruity, the stimulus of another's smile, relief from strain, and play.

All these experimental situations produced smiling and laughter in some children at all age levels. In general, there was no large shift in the effectiveness of the various situations from one age level to the next, although the incongruity, superiority, and play situations be came somewhat more laughter provoking as age increased. The major change with age consisted not so much in the appearance of laughter in response to a type of situation that previously was ineffective, as in an increased tendency to laugh at more of the specific situations used to represent a given class of laughter-provoking stimuli. Six-year-olds laughed less than did five-year-olds. Justin suggests that this decrease may be due to a toning down or subduing effect associated with school attendance. All the six-year-olds in the study were first graders, and most of them were studied in their own school building.

The development of humor is interrelated with other aspects of development (Laing, 1939; Omwake, 1939; Wolfenstein, 1951). When a child is able to appreciate relationships in size and space, he may notice and laugh at incongruities which he did not notice before, such as Junior's small cap on Papa's big head. When he himself is able to discriminate and to articulate speech sounds, he may find it humorous when a younger child makes mistakes, such as he himself had made at an earlier age (like singing, "Me muvver and fahver were Irish"). As he gains increased understanding he may appreciate word play:

Question: What did the rug say to the floor?
Answer: Stick 'em up, I got you covered.

Question: Why did the ram fall over the cliff?
Answer: He didn't see the U-turn.

Question: Mr. and Mrs. Bigger had a baby. Now who was the biggest in the family?
Answer: The baby, because he was a little *Bigger.*

When he appreciates human foibles of various kinds he may relish jokes that bear such foibles:

Boy: Dad, I want a quarter for being good.
Dad: When I was a boy I was good for nothing.

Painter (to another who is standing on the top of a stepladder, painting the ceiling): Hold on to your brush, George, I'm going to borrow your ladder.[10]

At the elementary-school level and beyond, a good deal of children's humor, at least as represented by "favorite jokes," deals with topics and ideas that are slightly, if not entirely, on the forbidden side (Brumbaugh, 1939). ("What would you do if you saw a bear?" "Run." "What! With a bear behind?") In a study by Brumbaugh (1940) of elementary school children it was found that children often waited for a signal from the teacher before they felt free to laugh at something which apparently struck them as funny. Brumbaugh also found that many teachers used humor sarcastically, by saying something that made other children laugh at a youngester much more often than they used humor in a friendly spirit.

From an early age, some children like to think of themselves as having a sense of humor, and some youngsters will spend much time and go to great pains in their efforts to discover what makes people laugh, what they can do to make them laugh, and how to gauge timing and emphasis to bring out the comic in what they do and say. In a study by the writer in which youngsters told what they liked about themselves, and what they did not like about themselves, there were many who expressed appreciation of their sense of humor but no one voiced pride (or had the heart to voice regret!) about being without a sense of humor.

One aspect of "humor" that deserves passing mention is so-called humor that has a malicious element. Much of what goes under the name of "practical jokes" is in this category. The "pay-off" in a practical joke is that someone is humiliated or made to look ridiculous or is left at a loss, as when a child is given an empty package for a present, or a present of a baby carriage is given to two people who are being married in their sixties, or an obscene remark is written on the back of a plaster cast worn by a clergyman who has recently

[10] These examples are from a collection of favorite jokes reported in writing by a group of youngsters.

been in an accident. Such practical jokes may contain a coarse element of humor but their main character is that they express hostility, more or less thinly disguised.

Emotional Ramifications of Sexual Development

A mature person's emotional reactions to sex have a history extending back to early infancy.[11] Many of the theories concerning the development of sexuality and the role of sex in human behavior have been advanced by Freud (1930, 1933, 1938). Not all these theories have stood the test of time and further scientific study, yet they have been of great value, for whether or not adequately supported, they have drawn attention to a highly important aspect of life.

One important generalization about sex development which Freud took the lead in announcing has already been mentioned, namely, that experiences related to sex enter into the child's life from the time of infancy.[12] Evidence bearing on this point was noted in Chapter Four in accounts of the occurrence of tumescence and detumescence (Halverson, 1940) in early infancy and various forms of self-stimulation during infancy and preschool years.

There apparently are great individual differences in sexual development among children of both sexes, but there is considerable evidence that at least some boys and girls at an early age have a capacity for sexual responses that are very similar in important respects to adult erotic responses.

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[11] Sex can hardly be called "emotion," and a discussion of sex does not follow logically from the immediately preceding section, yet the topic seemed to be more at home in a discussion of emotion than in other sections, especially since sex is deeply intermingled with emotions that range from tenderness and joy to anxiety and hostility.

[12] In addition to references on the subject of sex directly cited in the present discussion the reader is referred to a discussion of psychoanalytic theories by R. R. Sears (1943) and studies of sex interests and practices by Ramsey (1950) and Kinsey and his associates (1948, 1953).

In the psychoanalytic field the writings of Freud mentioned above and of Horney and her associates, and the work of Harry Stack Sullivan as it bears directly or by implication on theories pertaining to sex, are especially instructive. See especially Brill (1944); Horney (1937, 1939, 1945, 1946, 1950); Sullivan (1947, 1953); and Mullahy (1948). A treatise by Ford and Beach (1951) deals with patterns of sex behavior in different cultural groups.

According to findings obtained by Kinsey and his associates (1953), and evidence reviewed by them, there are children, both male and female, who are "quite capable of true sexual response" prior to adolescence.

It is often in connection with adult reactions to any interest children display in their genital organs or any handling of the genital organs that children receive some of their first impressions of adult attitudes toward sex. The parents of one child may look upon the first signs of sex behavior as something quite normal and healthy (and inevitable). The parents of another child may regard the same behavior as something that is alarming and loathsome.

By the time children reach the age of four or five most of them have noticed and have become familiar with differences in the external genital organs of the two sexes. This discovery may stimulate interest even though there is a lack of convincing scientific evidence in support of the theory, held by some, that in the normal or typical child the process of becoming aware of anatomical differences between the sexes is in itself emotionally disturbing or that such awareness variously leads to feelings of anxiety or envy or hostility.[13] In this as in other aspects of sex behavior children will differ widely, and their reactions are likely to be influenced by adult attitudes. One Freudian concept connected with anatomical differences between the sexes is that of "penis envy" which, taken literally, carries the assumption that the girl is envious of a boy's penis and feels inferior for want of one, but which also is used in a more symbolical way to represent or identify disadvantages which are the lot of women and not of men. If taken to mean that all girls literally envy boys their penises, and feel pretty much cheated because they do not have any, this concept is questionable. If used to express the fact that everyone can probably find something in others to be envious about, and that one form of envy is the envy some women feel toward men, the expression "penis envy" is a very earthy and pithy manner of speech.

As they move into the preschool years and beyond, many children conceal their interest in sex from the eyes and ears of adults. A large proportion of children, if not all, are interested, however, in one way

[13] For diverging statements regarding this, see Levy (1940) and Conn (1940).

or another. All normal children sooner or later become curious about reproduction and the form of their curiosity or the kind of information they seek is likely to vary as they mature. During elementary-school years a large proportion of children also have experiences relating to sex, such as observation of the sex behavior of animals or people, or being exposed to the advances of older children or adults, undertaking sex play in private, or entering into sex play with their peers. In a study of boys by Ramsey (1943) it was found that 72.6 per cent of the boys had had experience with masturbation by the age of twelve.[14] No physical damage was reported in connection with these experiences but boys did report many fears and much worry. In this same study about a third of the boys reported that they had attempted heterosexual intercourse before adolescence. In their studies of female sex behavior, Kinsey and his associates (1953) found that about 14 per cent of the females in their sample recalled that they had reached orgasm prior to adolescence through masturbation or sexual contacts with other children or with adults. They surmise that, in addition, there might be many others who had had the experience without recognizing its nature. In a study by Landis, Landis, and Bolles (1940) over half of a group of normal single women aged fifteen to thirty years and almost half of a group of normal married women aged twenty-two to thirty-five years reported that their first experience with sex aggressions had occurred prior to puberty, ranging from exploration of their bodies by a boy of their own age to sexual advances by an older boy or adult.

Such findings as the foregoing should not be regarded as typical for all communities or for different sections of the population. There are large variations in sex behavior as in all other matters. The findings in the study by Kinsey *et al.* (1948) of sexual behavior in human males show, for example, how various socioeconomic groups and families with differing educational background vary decidedly in their sex practices, particularly before marriage. In any event, such findings as these, while dealing with only a very limited aspect of sex behavior, indicate impressively that a large proportion of preadolescent chil-

[14] See also Ramsey (1950).

dren have experiences with physical aspects of sex that go beyond a passive, academic interest in the subject.

Findings in various studies show that many children have impressions or experiences relating to sex and have discussed the topic with other children before they have received any supplementing information from their parents or from other responsible adults.[15] In view of adult attitudes this is not, of course, surprising. No matter how wholesome and healthy an adult's attitude may be it would be difficult for him to be entirely certain as to how or when to approach the topic, and even the most knowing adult could not be entirely certain as to how to deal with the subject. Moreover, even when relationships are very friendly and the child feels completely free to go to the parent he may prefer to discuss some aspects of sex with his own peers. It is likely that there will be matters of interest connected with sex which a ten-year-old does not especially care to discuss with Dad, just as Dad has interests which he does not discuss with Grandpa. Systematic scientific findings dealing with the sex development of normal children in our culture and of children's readiness at various maturity levels to receive information and to understand the rules governing sex behavior are very much needed.

Tables XIV and XV show results obtained in a study of questions relating to sex that were asked by children in a study conducted by Hattendorf (1932) by means of interviews with parents.

The child's attitudes and behavior are influenced, of course, not only by factors relating to the physical aspects of sex but also by countless other factors in the total context of his relationships with others. His attitude toward members of the opposite sex, his concept of his responsibility and role as a member of his own sex, and his capacity for affection, loyalty, and tenderness in his relations with the opposite sex will be influenced by the example set by those about him, by the evidences of affection between his parents, by examples of respect, helpfulness, and the like in relations between adult members of the opposite sex, and by countless factors that go into his everyday relations with peers of the opposite sex.

In many writings during recent years there has been an increasing

[15] See studies reported by Willoughby (1937).

TABLE XIV

CLASSIFICATION OF QUESTIONS WITH RESPECT TO SEX ASKED BY 1797 BOYS AND GIRLS AGED 2 TO 13 YEARS AS REPORTED BY PARENTS[16]

Question	*Number*	*Percentage*
Origin of babies	722	40.9
Coming of another baby	256	14.5
Intra-uterine growth	42	2.4
Process of birth	183	10.4
Organs and functions of the body	209	11.9
Physical sex differences	226	12.7
Relation of the father to reproduction	92	5.2
Marriage	36	2.0

TABLE XV

RANK OF INTEREST FOR 865 QUESTIONS OF CHILDREN TWO TO FIVE, 707 QUESTIONS OF CHILDREN SIX TO NINE, AND 191 QUESTIONS OF CHILDREN TEN TO THIRTEEN YEARS CLASSIFIED IN EIGHT GROUPS[16]

Classification	*Age, Years*		
	2 to 5	*6 to 9*	*10 to 13*
Origin of babies	1	1	2
Coming of another baby	4	2	1
Intra-uterine growth	7	7	8
Process of birth	5	3	5
Organs and functions	3	4	3
Physical sex differences	2	4	6
Relation of father to reproduction	6	6	4
Marriage	8	8	7

emphasis on the place of sex in the total economy of the personality and the manner in which sex fits into the structure of a person's character as a whole. To understand the role of sex in the child's development and in connection with his everyday interests, attitudes, conflicts, anxieties, and strivings it is necessary to bear in mind not only that sex has a degree of developmental independence and a powerful biological urgency in its own right, but that sex also plays

[16] K. W. Hattendorf: "A Study of the Questions of Young Children Concerning Sex: A Phase of an Experimental Approach to Parent Education," *Journal of Social Psychology* (1932), 3:37-65.

an important role in connection with the attitudes a growing child develops regarding himself and others. In addition, sexual interests, and strivings, and attitudes may be a symptom or an expression of more pervasive attitudes toward self or others which are not primarily sexual in origin but which manifest themselves in sexual terms.[17] In other words, sex is a factor which plays both a primary and a direct role in behavior and also a secondary and derived and symbolic role.

When a boy child has an erection, and is restless, and reaches toward his penis to stroke it, and sensations connected with this have some kind of erotic quality, and when later in his development he has a seminal emission, there is something of the primary nature and inherent urge of sex involved in this (although as soon as he begins to manipulate himself something more has entered). But now let us say that his parents are horrified and shocked by his early evidences of sexuality, or that his teachers look on him with loathing and contempt when he furtively plays with his genitals at school, or other children, from the time he is quite young, refer to sex and sex activity with language which suggests that sex is shameful, a kind of pollution, or a way of inflicting an indignity on oneself or on others. Through these attitudes, and through the medium of attention to sex, the child's parents and his teachers and playmates are, in a sense, placing a stigma on him and passing judgment on him. The logic of it, if he formulated it in words pertaining to himself, would go almost like this: If sex is dirty and sex is part of me then I (at least to that extent) am dirty: If sex behavior is evil, and I either engage in it or am constantly tempted to do so, then I am evil (at least to that extent). If sex has a meaning of opprobrium and contempt (as it has when people express their disdain for another by saying someone should commit a sexual assault upon him), then to a degree I or a part of me is worthy of opprobrium and contempt. Moreover, if sex is viewed in a context of hostility as well as contempt, then that meaning, too, is added.

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[17] See especially writings by Horney, already referred to. See also discussions in pamphlet form by Pinsky (1950a, 1950b, and 1951); Harte (1951); Kelman (1945, 1946); Weiss (1948, 1950); and Wenkart (1949).

So, not because of any primary reminder from nature that sex is something bad or salacious or contemptible or punitive, but through the mediation of others, sex has taken on such meanings. Through the medium of shame regarding sex the child feels shame concerning himself.

Now if we add an element of conflict, as we do as soon as a child becomes secretive and furtive, or alternately struggles and yields in the battle with temptation, or disobeys by entering into forbidden sex practices, we have a situation in which the child, even at an early age, is divided against himself. Where there is such tension arising out of conflicting and incompatible tendencies it is easy for anxiety to enter. Where such a struggle prevails it is likely that what we call guilt will enter in. And when a child feels anxious by reason of sex, it is *he* that is anxious, not just a part of him; when he feels guilty about sex, it is *he* that feels guilty, not just a segment of him. From such a state he might readily go on to blame himself severely, look upon himself as unworthy and contemptible. When this happens, even on a small scale, something serious has happened not simply in his sexual development but in the development of what we call the self: Something has cast a blight over the totality of him as a person. Out of that other consequences may flow, as often is the case. The child makes efforts to shield himself, to overcome the evil that is in him. Perhaps he resolves to become extremely virtuous and good, so even at a rather early age one may find a child who strives to be rigidly righteous as a defense against sex, not so much through love of virtue but as a means of defense against something he fears within himself. At any rate, it is not just the child's sex that is involved, but his attitude toward himself, and this attitude toward self may bear the beginnings of a severe attitude of self-rejection.

As already indicated, this attitude of self-rejection is at first mediated through the attitudes expressed by others. Here again, sex may be the medium through which people in his environment who are anxious, or harsh and self-deprecating, communicate their derogatory attitudes to him. If a parent is already a rejecting parent, given to harsh punishment, he may pounce upon some little show of sexual

interest and investigation by the child as grounds for inflicting punishment.

Sexual practices and attitudes not only may be the medium through which derogatory attitudes are communicated to the child, they also can become the medium through which he expresses his attitudes toward others. In time, for example, a person with unresolved grievances and hostilities may use sexual assault or seduction or erotically colored flirting and teasing as a means of attacking others and making them feel badly. If sex to him represents shame, he may use his sexual advances to shame others. If sex, to him, is deeply invested with the concept of disobedience and rebellion, he may become involved in sexual activities not solely because of the lure of sex but as a way of being rebellious: Sex may become a medium for defiance of authority. Again, sex may acquire a connotation of yielding, and so sex behavior can become a vehicle for compliance; again, sex may become involved in the larger context of activities in which youngesters vie with one another, and so sexual conquest (or mild versions, such as taking away another boy's or girl's "steady") may be a means of expressing competitive strivings.

Also, and inevitably, sex has a connotation of intimacy, and so a young person (or an old one) who feels lonely or cast aside and who has a desire for emotional closeness with someone may seek through the physical closeness of a sexual embrace a kind of emotional intimacy he has not been able to find by other means.

Because of the fact that sexual activities may express many strivings other than erotic desire, they have many interpersonal ramifications. The nature of this relationship may be considerably more important, from a psychological standpoint, than the fact that sex is an element in it. The relationship between young people (or older people) who are involved together in sex activities may be the relationship between one who dominates and one who yields; or of one who seeks to be punished and one who seeks to inflict punishment; or of one who wishes to surrender and one who wishes to defy; or of one who seeks tender emotional intimacy and one whose only desire is to exploit or to inflict pain. A person may make sexual advances as one who wants to "prove" himself and as one who wants to make a conquest;

or as one who seeks a confirmation of his own ability to love and be loved and one who similarly is seeking to love and be loved. These, and many other kinds of relationship, may exist whether or not the sex behavior in question happens to involve a complete sexual union. Such varying social implications may be involved in any one of the countless varieties and degrees of courtship which take place (from an early age) through glances, little understandings, expressions of favoritism, exchanges of small gifts, evidences of special friendliness, or other gestures or tributes or signs which a boy or a girl might draw from the rich symbolism of youthful romance.

There may also be personal consequences springing as a secondary result from courtship activities, especially as children become older and near adolescence (or middle or old age). If, for example, there is something false in a person's sexual advances to another (he speaks of love, let us say, but his object is to gain a conquest, or to rebel against authority, and so on), this condition is likely to leave emotional aftereffects not just because of sex, but because of something more fundamental: a lack of integrity in a relationship with another person and a lack of integrity within himself. Unless a person were in conflict and divided within himself he would not have a compulsion to use sex (or any other medium) for conquest over someone else. While many youngsters feel guilty about sex as something wrong in itself there probably also are many, especially among the older ones, whose guilt is sharply aggravated by the fact that their sexual behavior (or their sexual impulses) has something devious connected with it quite apart from the erotic aspect. Much of the prevailing guilt and anxiety with reference to sex in our society probably springs from the fact that the motives surrounding sex sometimes are not "pure," whether or not the sexual impulse as such is legitimate.

In the foregoing discussion an effort has been made neither to underrate sex nor to overrate it. Behavior episodes and relationships with others during childhood in which sex is involved range from situations in which sex is the central issue to situations in which sex is only an incidental psychological feature (even though it is quite a prominent behavioral feature). In trying to understand children

it is foolish to belittle sex. But it is just as foolish to look upon sex as *the* key to the understanding of children or as the royal road to understanding the child's emotional life. Sex is but one feature of the total of capacities and forces and the biographical events that shape and constitute a personality. Sexual fulfillment is not the sole fulfillment of a personality. The overtowering principle is the realization of the potentialities of the personality as a whole.

Other Emotional Aspects of Parent-Child Relationships

The relationships between parents and children involve many feelings and emotions in addition to affection, anger, and jealousy. Until recently the problems and headaches involved in having children have received much more attention in research than the fun and satisfaction that parenthood entails.

In a study with which the writer was associated (1949), several hundred parents, in private interviews, were asked to describe the joys and satisfactions and the problems and difficulties that they had experienced in rearing their children. The children ranged from a few months to over twenty years of age.

One of the most prominent satisfactions of parenthood, according to these parents, is the companionship a child affords—the child's friendliness, his affection for his parents, the fact that he and his parents can have interests in common and can enjoy things together. Enjoyment of children's personality traits represented another prominent source of satisfaction to parents. Many of the satisfactions in this and related categories represented an interest in the development of the child, pleasure in watching the phenomena of growth, and the emergence of a distinct personality. This interest in development of the child's unique qualities as a person led many parents to report that they obtained pleasure from observing the child's personality development even when this involved characteristics which are not usually, per se, regarded as assets, such as a quick temper or a tendency to be very sensitive. Another important source of pleasure and pride, perhaps of a somewhat self-congratulatory nature, comes from

what might be called the *vocational* aspects of parenthood—the challenge of caring for children, carrying out small and large duties, plans, and policies in child rearing, successfully coping with problems, and the like.

The problems and dissatisfactions involved in child rearing are not consistently the counterpart of the satisfactions, according to the parents in this study. Some features stand relatively high in both satisfactions and problems, such as children's favorable or unfavorable personality traits, good or bad relationships between siblings, good or poor response in "routines." However, many of the things that are noted as "problems" when conditions are bad tend to be taken for granted when conditions are good. Examples of this appear in categories relating to family finances and goodness or badness of living quarters and also, to a lesser degree, in the category of health. An interesting feature is that parents tend to a greater extent to take credit to themselves in describing satisfying features of child-rearing than to blame themselves in describing their problems.

A comparison between the findings in this study which are based primarily on the testimony of mothers with findings in a study of fathers by Tasch (1952), indicates that the two parents show, in general, a high degree of agreement but also some differences. Enjoyment of companionship provided by children, of children's personality traits, and of children's intellectual qualities occurred frequently in the reports of both fathers and mothers. In accounts of satisfactions, fathers mentioned physical appearance and a category including "mannerisms, cute and cunning ways, bright sayings, and the like" more than did the mothers. On the other hand, in accounts of problems, fathers also more often than mothers mentioned the inconveniences and minor annoyances caused by the child, such as leaving a toy about that someone might trip over, getting into things, and so forth.

As one might expect, it has been found that a parent is likely to derive many satisfactions from a child that are not experienced to the same extent by the child's teacher. Table XVI gives illustrations of this from a study of thirty-six children. The fact that the parent

has a greater emotional stake in the child is indicated, for example, by the finding that enjoyment of the child as a companion was spontaneously mentioned in parents' accounts of twenty-eight of the children and by teachers in only one instance. Parents also revealed much more identification with the child's nonacademic hobbies,

TABLE XVI

FREQUENCY OF VARIOUS SATISFACTIONS AND PLEASING QUALITIES (IN SELECTED CATEGORIES) ASSOCIATED WITH 36 CHILDREN AS DESCRIBED BY PARENTS AND AS DESCRIBED BY THE TEACHERS OF THE SAME CHILDREN[18]

Quality or Characteristics	*Number of Children So Described*	
	By Parents	*By Teachers*
Miscellaneous personality traits and temperamental qualities:		
Amenable, considerate, cooperative, affectionate, kind	28	17
Honor, integrity, dependability, truthfulness	19	2
Inner strength, fortitude, independence, self-sufficiency	16	7
Good sense of humor, full of fun, jolly, laughs easily	13	9
Enterprising, ambitious, full of initiative	11	13
Vigorous, lively, busy, decisive, plays hard	9	12
Pertinacious, persistent, finishes things, slow but sure	7	7
Even-tempered, good disposition, passively happy	4	7
Intellectual qualities:		
Amount, quality, taste in reading	14	13
Good mind, bright, intelligent	11	16
Good imagination, fanciful, constructive	7	11
Good capacity for concentration	4	8
"Social" qualities:		
Gets along well with other children	13	18
Good manners, courteous, gracious	13	2
Leadership, is leader in his group	6	6
Artistic interest, ability, appreciation:		
Music	16	2
Painting	10	8
"Sensitive to beauty," artistic nature	6	0
Companionship, shared interests	28	1
Pleasure, pride in duties in bringing up, in educating child	16	1
Friendly sibling relationships	16	0
Response to routine habit training	14	0
Motor abilities, good coordination	13	3
Miscellaneous hobbies, interests	10	3

[18] Adapted, in much abridged form, from C. del Solar: *Parents and Teachers View the Child*. Bureau of Publications, Teachers College, Columbia University, 1946. Published under the auspices of the Horace Mann–Lincoln Institute of School Experimentation. Reproduced by permission.

habits, skills (including both motor and artistic), his manners and his morals. Teachers and parents showed most agreement in mention of intellectual qualities and of the child's ability to get along with other children outside the home.

Parental Attitudes Toward Their Mistakes and Shortcomings

All parents make mistakes in bringing up their children, and most parents feel more or less guilty about their errors. Mistakes are inevitable, for no matter how wise and clever and goodhearted a parent may be, he and his child will get into countless situations which cannot be solved by rule of thumb. A child who is growing in ability and zest for life will make countless ventures along unbeaten paths. The parent and his child are constantly confronted with choices and decisions by the changing interests and impulses that come with the child's growth and by unpredictable day-to-day happenings and by ceaselessly shifting circumstances in the interpersonal relationships in which all members of the family are involved. Some of these decisions and choices are bound to be "wrong." Even the most enlightened foresight will at times prove to be a mistake in the light of hindsight. To say this sounds rather trite, yet it has a profound meaning from a practical point of view and it also has certain ethical implications.

From a practical point of view it means that when parents deplore their mistakes (as a great many parents do), they often are measuring themselves against a standard of perfection which would be impossible for any human being to achieve.

The simple proposition that mistakes are bound to happen also has an ethical implication. A parent and a child cannot live healthily without some venturesomeness. They cannot live spontaneously and at the same time guard with perfect precision against mistakes. There must be some freedom, and freedom includes the right to make mistakes. To function as a parent a person must also retain the right to be himself. If a parent gives himself so completely over to the care

and service of his children that he reserves no rights of his own, he will run into conflict within himself on one issue or another. Moreover, his children can't get much from their relationships with him if he, in his own sphere, is nothing or acts as though he were nothing.

CHAPTER TEN

Emotional Development (II)

Fear and Anxiety

From an early age all children are more or less troubled by fear, and some are so afraid that their freedom of action is seriously impaired. Adults too are often afraid, and many of them struggle with unresolved problems that are rooted directly or indirectly in their childhood fears. Fear exists so generally in contemporary life that the present time has been called the "age of anxiety." This probably does not mean that the present age is more fear ridden than earlier periods in history but that people recognize the inroads of fear more clearly and acknowledge them more openly than they did in the past. In earlier generations one mark of a hero was that he was without fear. Now it is recognized that such a hero probably never existed. No one who is alert to currents in his own life and to circumstances in the world in which he lives can be wholly without fear. Some people are afraid to admit to others that they are scared, and there are some who are unwilling to grant to themselves, in the privacy of their own thoughts, that they are afraid. Others who see themselves more humbly and who face reality with more courage do not feel it necessary to play false in this regard: They accept the fact that fear has had, and still has, an important place in their lives.

Early Signs of Fear

During infancy, a child's fears arise mainly in response to happenings in his immediate environment. As he grows older, the range of his fears grows wider. As he acquires the ability to dwell upon his

past and to anticipate his future, a large number of his fears pertain to distant dangers, forebodings as to what the future may bring, and apprehensions concerning his own impulses and what he has done or might do.

There have been various theories as to what are the original or unlearned fear stimuli. In an earlier day, there were theories to the effect that we are endowed with many instinctive fears, such as fear of animals, of the occult, of death, of large bodies of water, and so forth. Later a theory was advanced that there are only two original, "natural" fear stimuli, namely, loud noises and sudden displacement or loss of support (Watson, 1924a, 1924b), but this account was as inadequate as it was simple. The circumstances that may give rise to so-called "unlearned" fears in the infant include not simply noises and loss of support, but any intense, sudden, unexpected, or novel stimulus or any condition which demands some kind of adaptation for which the organism is unprepared.

Moreover, the fear stimulus cannot be described as consisting simply of an isolated external stimulus like a noise, for example. Depending upon the condition of the organism at the time—whether, for example, it is in a state of tension or relaxation—a certain noise may produce fear at one time but not at another. In like manner, a happening may produce fear in one child and not in another. It is necessary to take account not only of the condition of the individual who is responding but also of the setting of the external stimulus. A noise and a sudden movement, each of which alone elicits no response, may, in combination, produce fright; again a jolt may arouse fear when a child is with an unfamiliar person but not when a familiar person is near.[1]

The Role of Maturation

The young infant is unaffected by many stimuli that will frighten him at a later time when his capacities for perception and discrimination have matured. An example of this was given in the chapter on

[1] English (1929), and Valentine (1930, 1946) give illustrations of the difficulty of predicting when a child will be afraid.

social behavior in the discussion of shyness with strangers. Gesell's (1929) account of the response of infants at different ages to confinement in a small pen offers a further illustration. At ten weeks, the child may be completely complaisant in this situation; at twenty weeks, he may exhibit mild apprehension, as betrayed by signs of dissatisfaction, "persistent head-turning and social seeking"; at thirty weeks, his response to the same situation "may be so vigorously expressed by crying that we describe the reaction as fear or fright." As the child matures, new things affect him by reason of his keener perceptions, and fear is likely to arise when the individual knows enough to recognize the potential danger in a situation but has not "advanced to the point of a complete comprehension and control of the changing situation." (Jones and Jones, 1928.)

Changes with age in fear responses appeared impressively in a study, in which a large, active, harmless snake was set free in an enclosure with persons of various ages. Children up to the age of two years showed no fear of the snake; children aged three and four tended to be cautious and hesitated to approach or touch the snake; more definite signs of fear were displayed more often after the age of four and were more pronounced in adults than in children. (Jones and Jones, 1928).

Changing susceptibility to fear is interwoven with other aspects of the child's development in many ways. With the development of the child's imaginative abilities, his fears become increasingly concerned with imaginary dangers. With the development of the meaning of competition and of awareness of his status as compared with others, there frequently come fears of loss of prestige, ridicule, and failure. The wider the scope and range of a child's understanding, the more he is able to recognize possibilities of disaster, and the more versatile he becomes in fitting his apprehension into varied images and lines of thought. This does not mean, fortunately, that the child becomes more and more afraid, for with a gain in understanding there also is likely to be a waning of fears due to ignorance and a gain in ability to discount dangers that are highly improbable, and to cope with danger that actually might occur.

That maturation plays an important role in children's fear is

brought out interestingly in the finding that a child who is precocious or advanced in his development may be afraid of events which do not disturb other children until they are older (Holmes, 1935). A bright two-year-old may, for example, show fear of a strange room or of a snake which does not disturb the child of average mental ability until later.

The Role of Learning

Fears are also influenced by learning to an important degree. By virtue of a painful experience, or of having been startled or overwhelmed, a child may "learn" to fear something which earlier did not disturb him.

This learning may be quite direct, specific, and restricted: A child is bowled over by a dog and later fears that dog. Again, the effects may be more general: The child may fear not only the dog that hurt him but all dogs and, perhaps, he may be on guard, as never before, whenever he sees any four-footed animal. Similarly, he may not only be afraid when he sees a dog but he may also be apprehensive when he passes the yard where he knows a dog is kept, even though no dog is in sight.

The process by which fear is acquired may also involve indirect or intermediate steps. For example, a child who had been knocked down but not seriously injured by an automobile was still quite wrought up when he went to bed, and then he had a bad dream. Thereafter he was afraid of going into his bedroom when dark. Through the dream, the accident and its emotional effects had been placed, so to speak, in the setting of darkness. Once a child is frightened, his fear may thus spread to many other things and conditions.

The most essential element when such a "spread" takes place is the fact that something frightened the child or left him in a state of apprehension or fear. The conditioning process does not in itself create a new fear but provides an object, condition, or circumstance other than the one that frightened him in the first instance and with which his fright becomes associated.

Changes with Age in the Expression of Fear

As children grow older, there is a decrease in the number of occasions per day or week when they exhibit overt signs of fear, such as crying, trembling, shrinking, retreating, or clinging to an adult. However, this does not mean that there is a corresponding decline in the role of fear in the child's everyday life. The decline in overt expression occurs, in part, as a feature of the child's general tendency toward less open display of emotion as he grows older. The decline is associated also, in part, with changes in the character of the dangers which the child fears: Lingering fears formulated in terms of imaginary dangers, or apprehension concerning misfortunes that might occur, seldom express themselves in sudden starts, cries, or fleeing. Often such imaginary fears leave nothing to flee from, for the child who does both the fearing and the imagining cannot physically run away from himself. Just as fear reactions may occur in countless varieties and degrees as a child grows older, ranging from transitory fear of a specific person or event to less clearly formulated anxieties, foreboding, feelings of guilt, and uncertainty, so also the expression of fear may take on innumerable forms and occur in countless disguises. It can range from an obvious show of fear to a show of the opposite, and from extremely good and compliant conduct to surliness, stubbornness, resistance, unwillingness or inability to "see the point," and outright rebellion and definace that look like anger more than like fear.

As we have already mentioned, many social pressures are brought to bear upon children to get them to conceal or disguise their fears. Children taunt one another and adults also discourage the display of fear, asking the child to "be big" or to "be brave," or urging that there is "nothing to be afraid of." What an adult thus says to reassure a child may fail to dispel the child's fear and only give the child the impression that it is cowardly to be afraid.

By virtue of the premium that is placed on not being afraid, or not revealing that he is afraid, the child may be driven to the point that one of his fears is the fear of showing fear. Many children, at quite an early age, get the idea that it is shameful to be afraid. In

many persons, by the time they are adult, this goes to the extent that they are so frightened at the thought of revealing fear they do not dare to appeal for help. By a tragic twist of logic, some such people see themselves not as frightened persons but as brave people who have the courage to go it alone.

In this and the following paragraphs are a few examples of concealment of fear. A girl of three-and-a-half years asked her mother to fetch a doll that had been left in a room separated by a hallway from the rest of the house, and she kept insisting violently after the mother had suggested that she get it herself. The mother then suspected what was the matter and said, "I'll hold the door while you get it." At this the girl ran happily to the room and got the doll. The mother remembered that the child had been frightened previously by the slamming of a door in this hallway, and now, instead of admitting that she was afraid, she was trying to commandeer her mother. Someone else might have thought the girl was an unreasonable child, not a frightened child.

A girl of seven, two nights in succession, after having been put to bed, insisted that she had to go downstairs because she had forgotten to bring a blanket for her doll and asked her mother to go with her since she did not like to go alone. On the second night her mother, thinking that the girl was merely trying to delay her bedtime, refused to accompany her, so finally she had to go by herself. She hurriedly went all the way to the basement where she got the blanket; then she apparently went on another quick errand on the first floor, and then returned to bed. A few minutes later she revealed that the main reason why she had gone downstairs was to make sure that the front door was locked. On some previous nights she had anxiously inquired as to whether the front door was locked. It appeared that her trip downstairs was motivated by fear and that she was using the "forgotten" doll blanket simply as a device for making sure that the door was locked.

A boy of ten had earned two passes to a circus, but upon coming home from the afternoon performance he said he did not care to go again, and so he gave his remaining pass to his brother. It was not until some time later that he happened to reveal that on his way out

of the circus grounds during the afternoon he had been threatened and chased by two older boys who belonged to the circus, and that he did not go to the show again because he was afraid.

The disguise a child uses for his fears becomes especially troublesome if, instead of getting him out of trouble, it gets him into more trouble. A child may be so frightened at the thought of being laughed at in class that he will keep silent and act dumb rather than recite and make a mistake. To understand the child who is afraid, it is necessary to be alert to such disguises, although no adult can be expected to be all-knowing.

What often happens is that parents assume that their child is quite free from fear when actually he is afraid of many things. Needless to say, the concealment of fear makes it more difficult for adults to help the child to cope with fear. But when adults induce children to hide their fears or to dispel them it is not simply because the adults are deliberately being stupid. The reason more often is that adults, too, are afraid: They may not be afraid of the same things that scare their children but it is the fact that their child is afraid that is frightening. A frightened child is in many ways a threatening child, threatening in the sense that he presents a problem. The fact that he has a problem which expresses itself in fear (so he must be "insecure") may in itself be a sign to the parent that he has failed (as though any parent could be so perfect that he could bring up a child completely free from fear!). If now the parent uses some of the ordinary devices for overcoming fear and finds they do not work, that may be even more disturbing. And if the parent, although not afraid of exactly the same things, still suffers from fears which express unresolved apprehensions in his life and which he does not have the courage to face, even in the privacy of his own thoughts, then his child's fears are likely to be even more disturbing, for they activate, as it were, his own anxieties. So for such reasons (and others) a parent, even in spite of himself, may urge a child to conceal his fears by telling him there is nothing to be afraid of.

In studying children's fears it is important to recognize that in most fears there is more than appears on the surface. There may be both an open and a hidden content. Two children say they are

afraid of dogs, but to one the "dogs" may be two real dogs, two doors down the street, that are an actual menace, while to another child "dogs" is almost a manner of speech, for he is uneasy in the presence of any dog, or at the thought of meeting a dog, even when repeated experiences tell him that this or that dog is perfectly harmless. When he says he is afraid of dogs, he tells the truth and yet not the whole truth, for it is what the dog symbolizes rather than the external danger which the dog actually represents that bothers him. However, to understand fears it is important to take account of both of these features. Moreover, it is of course important to try to understand what lies behind the fear as described. The fact that the fear as represented to the child in his own mind, and as named by him, may be the child's way of describing not simply an external threat but an internal disturbance is especially noticeable when children mention fears that seem to have little or no basis in reality, such as when a child says he is afraid of ghosts, or when a child with an excellent record at school says that he is afraid he will fail in school.

Age Trends

Figure 5, which is based upon information obtained from parents, shows certain age trends in children's overtly expressed fears and openly reported fears as recorded by parents. There is a decline with age in fears in response to certain tangible and immediate situations (such as specific objects, noises, falling and danger of falling, strange objects and persons, and so forth) and an increase with age in the percentage of children who show or report fear of imaginary creatures, of the dark, of being alone or abandoned, and so forth.[2]

Table XVII shows findings obtained in a study of Holmes (1935) in which semiexperimental situations were used to investigate children's fears. The situations included being left alone (a concealed observer watches the child as he is left alone in the experimenting

[2] Figure 5 shows results obtained when a tally of one only was given in the case of each child who exhibited *one* or *several* fears of a given category. The relative frequency of various fear categories would be different if each additional item in a given category received a new tally, such as three tallies under "Animals" if a child mentions lions, tiger, and wolves (Pratt, 1945).

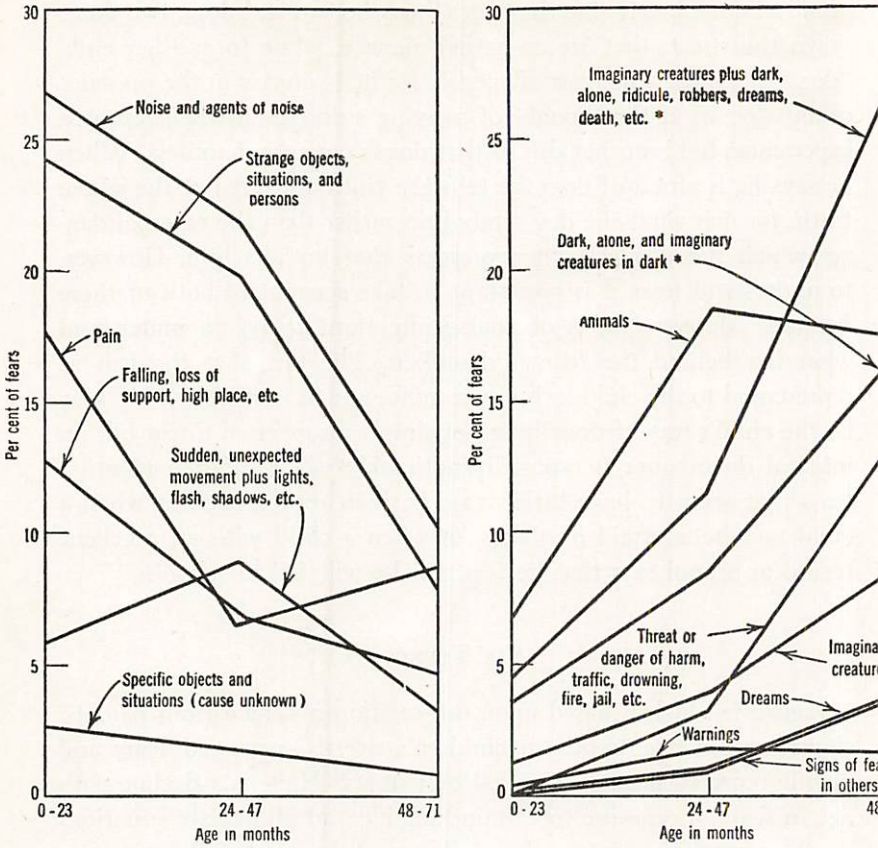
Noise and agents of noise
Strange objects, situations, and persons
Pain
Falling, loss of support, high place, etc.
Sudden, unexpected movement plus lights, flash, shadows, etc.
Specific objects and situations (cause unknown)
Per cent of fears
Age in months
0-23
24-47
48-71
Imaginary creatures plus dark, alone, ridicule, robbers, dreams, death, etc. *
Dark, alone, and imaginary creatures in dark *
Animals
Threat or danger of harm, traffic, drowning, fire, jail, etc.
Dreams
Warnings
Signs of fe
in others

FIG. 5. Relative frequency of fears in response to various situations exhibited or by children who were observed by parents or teachers. The data include 146 records of observation of children for periods of 21 days (31, 91, and 24 at the respective bi-yearly levels), combined with occasional records of 117 additional children (27, 67, and 23 at the respective levels). Adapted from *Children's Fears* by A. T. Jersild and F. B. Holmes, Child Development Monographs, 1935, No. 20, by permission of the publisher. Starred items represent the cumulative tally of two or more categories that also are depicted separately.

room when the experimenter leaves with the excuse that she has to get her handkerchief in another part of the building); falling boards (two inclined boards so arranged that, as the child steps from one to the other, one board suddenly tilts and gives way a distance of 2 inches); a dark room (the child is asked to retrieve a ball seemingly

inadvertently thrown by the experimenter into a long, narrow, dark passageway); a strange person (with the child in the room, and in his path if he endeavors to reach a box of toys—a woman rakishly dressed in a long gray coat, large black hat, and black veil that obscures the features of her face); high boards (the child is asked to walk across a plank raised at elevations of from about 2 to over 6 feet from the floor); a loud sound (produced by sharply striking an iron pipe with a hammer); a snake (the child is asked to pick a toy out of a box in which is a live snake, 2 feet in length); a large dog (the child is asked to go and pat a dog that is brought in on a leash). The experimental situations were not designed to frighten the child (except for the possibility that he might be startled by the noise and the inclined board), but rather to confront the child with a situation into which he could choose to enter and participate or from which he was free to withdraw and retreat. Records of what the children did were made by observers, and the presence or absence of "fear" was determined according to carefully formulated definitions and criteria. The number of children at each yearly age

TABLE XVII

PERCENTAGE OF CHILDREN AT YEARLY AGE LEVELS FROM 24 TO 71 MONTHS WHO SHOWED FEAR IN VARIOUS EXPERIMENTAL SITUATIONS [3]

Situation	*Percentage of Children Showing Fear*			
	24–35 months	*36–47 months*	*48–59 months*	*60–71 months*
I. Being left alone	12.1	15.6	7.0	0
II. Falling boards	24.2	8.9	0	0
III. Dark room	46.9	51.1	35.7	0
IV. Strange person	31.3	22.2	7.1	0
V. High boards	35.5	35.6	7.1	0
VI. Loud sound	22.6	20.0	14.3	0
VII. Snake	34.8	55.6	42.9	30.8
VIII. Large dog	61.9	42.9	42.9	...
Total	32.0	30.2	18.1	4.5

[3] From F. B. Holmes, "An Experimental Study of the Fears of Young Children," in A. T. Jersild, and F. B. Holmes, *Children's Fears*, Child Development Monographs (New York: Teachers College, Columbia University, 1935), No. 20, Pt. III, pp. 167–296. Reproduced by permission.

level ranged from twelve to forty-five, with the smallest numbers at sixty to seventy-one months.

The results shown in Table XVII indicate a trend toward a decrease with age in fear of the specific situations employed in the study. At the five-year level, only the snake elicited signs of fear. At five years, even the dark room did not produce overt symptoms of fear (but undoubtedly the presence of an adult accounted for this; for, according to their own reports, many children of this age are afraid of dark places, especially when they are alone). Holmes found, however, that the percentage of children who were afraid of the dark was considerably larger than the frequency of such fears according to the observations and reports of parents.

Many children have fears or apprehensions in which there is an element of fear of punishment or a feeling of guilt or remorse for past misdeeds. In a study of fifth- and sixth-grade children in which a list of "worries" was presented, it was found that a large proportion of children checked items having to do with punishment, being scolded, "making parents sad," telling lies, doing wrong, and the like.

A tendency to be apprehensive, even though no specific fear that can be named or identified is involved, often occurs as a feature of shyness and various forms of "withdrawing" behavior. In a study by Pritchard and Ojemann (1941) of children who were rated by their teachers as being "insecure," it was found that such children, along with other symptoms, exhibited a greater tendency to be apprehensive than did children rated as emotionally "secure."

Children's Fears as Compared with "Worst Happenings"

The extent to which children's fears, as reported by the children themselves, are formulated in terms different from prosaic day-to-day hurts and vicissitudes is illustrated by a comparison between accounts given by school-age children of their fears and of the "worst thing that ever happened" to them. Such a comparison is shown in Table XVIII. Actual harrowing experiences with animals, for example, con-

stituted less than 2 per cent of the "worst happenings," but fear of animals (mainly remote animals such as wolves, lions, gorillas, and so forth) represented about 14 per cent of reported fears.

The fears of children (and the same holds true for adults) usually go far beyond the statistical probabilities that disasters will occur. In one study by the writer and associates (1941) it was noted that

TABLE XVIII

FREQUENCY OF MENTION OF VARIOUS CATEGORIES IN CHILDREN'S OWN DESCRIPTIONS OF THEIR FEARS AND OF THE WORST THINGS THAT EVER HAPPENED TO THEM [4]

[Abridged results, based upon interviews with 398 children aged 5 to 12 years.]

Event Described	*Percentage of Children Naming Event*	
	In Describing Actual "Worst Happenings"	*In Describing Fears*
Bodily injury, falling, illness, traffic accident, operations, hurts and pains, etc.	72.7	12.8
Attack or danger of attack by animals	1.8	13.7
Contacts with, or activities of, criminals, kidnappers, burglars, bad characters, etc.	1.3	8.0
Being alone, in dark, in strange place, being lost, and dangers associated with being alone, darkness, etc.	2.3	14.6
Death, loss, removal of relatives, being abandoned by relatives	5.0	1.4
Contacts with, or activities of, or dangers from supernatural agents, ghosts, witches, corpses, mysterious agents or events	0.0	19.2
Scolding, embarrassment, being teased, ridiculed, etc.	5.5	3.4
Remaining categories	12.4	26.9

in a school system in which the percentage of failure or nonpromotion was less than two, the percentage of children who said they "worried" about the possibility of not being promoted was about fifty.

[4] From A. T. Jersild, F. V. Markey, and C. L. Jersild, *Children's Fears, Dreams, Wishes, Daydreams, Likes, Dislikes, Pleasant and Unpleasant Memories*, Child Development Monographs (New York: Teachers College, Columbia University, 1933), No. 12, 172 pp. Reproduced by permission.

Persisting Fears

Although many fears wane and even seem to disappear, a large proportion of childhood fears persist in one form or another into adult years.

In a study of childhood fears as recalled by adults (Jersild and Holmes, 1935), it was found that in the case of 804 fears concerning which information as to the subsequent outcomes was reported, over 40 per cent still persisted into adult years. This percentage cannot, of course, be accepted without reservation, since adults would be likely to recall the fears that still persisted and to forget many passing fears that had waned. Yet the findings in this study indicate that there is a large carry-over of childhood fear into later years. Of the fears described in this particular study as "still persisting," about 27 per cent were also described as being the "most intense" fears recalled from childhood, and 28 per cent were described as being the "earliest recalled" fears.

Among the fears that show the largest carry-over into later years are fears of animals; of bodily harm through such dangers as fire, illness, drowning; and of dangers associated with the supernatural, with the dark, and with being alone. Such continuing fears undoubtedly are a reflection of anxiety and of areas of conflict and insecurity in a person's life.

Some Special Conditions and Circumstances of Fear

Fear of strange things, conditions, and circumstances. As noted in the foregoing discussion and in the tables, many of the fears of children are a reaction to something strange, new, and unfamiliar. The condition of strangeness and unfamiliarity is relative, depending upon what a child has already become accustomed to and has learned to expect or not to expect. Throughout childhood and throughout life the growing person meets things that are new and strange: new people, unfamiliar surroundings, new features in his own development (as at adolescence), new discoveries concerning himself and his limitations, new ideas. In the normal process of growth, the

child constantly and in countless ways stands on the brink of the unknown and unfamiliar, and this gives him pause or may induce fear, and then, when all goes well, he gains acquaintanceship and what was strange recedes into the realm of the familiar where it causes no fear. But sometimes a child (and the adult) stands on the threshold of something new and does not succeed in making the hurdle.

The new is likely to be particularly threatening and frightening if it calls not simply for a bit of inspection and study but requires a person to make a revision in his own idea of himself, or threatens to confront him with an unwelcome discovery concerning himself (such as the discovery that some of his judgments are prejudices), or that something in his conception of himself is false, or (in an adult) that his "openmindedness" means a lack of courage in his own convictions or that his social and political views (whether very conservative or very radical) form a rationalization and not a reasoned position. Among the unfamiliar ideas that are frightening to some older children and adults are those involved in the concepts of hostility and anxiety, especially when they catch the idea that these concepts also apply to them.

Generally speaking, the more confident and forthright a growing child has been in facing the conditions he already has been exposed to, the less likely he is to be frightened by something new. But all human beings at all ages will be apprehensive now and then as they face the unknown, unless they are so anxious they dare not even approach near enough to glimpse how vast are the reaches of the unknown compared with what little knowledge they possess.

Fear of the dark. The dark figures frequently in the reports of fears of children, and it also is often feared by adults. There is something dangerous about the dark, both in what it represents in reality and in what it symbolizes. In the dark one actually is more powerless, as a rule, than when one can see; it is easy to stumble, to lose one's way. Darkness also signifies that one is out of sight, and others are out of sight, so it means psychologically that one is cut off from others. Darkness also adds a further threat if a child already is frightened, for his imagination may supply what he cannot see, and

the more frightened he is, the more he is likely to project into the darkness some of the dangers which already reside within him.

Fear of solitude, abandonment, loneliness, and death. Some children when questioned about their fears speak of fear of being alone or abandoned. Many children (perhaps all) have had momentary experiences of being abandoned: The mother may be in another room, out of sight and out of earshot; on a walk the parent may have moved out of view; in a crowd the child may have found himself completely surrounded by strangers. Such an experience, even if only brief and quite unintended, may be very frightening, but the child is likely soon to recover if his parents actually show up and are reliable.

But fear of abandonment may stand as a figure of speech, something symbolic yet something desperately real from a psychological point of view. There are many ways of abandoning a child short of actually deserting him. He may be abandoned, psychologically, by holding threats and punishments over him in a manner that says he cannot count on his elders to protect him. In the studies by the writer and his associates referred to in this chapter, many children reported cruel instances of having been threatened with abandonment.

When the writer was a child one such form of abandonment many children had to face (and probably the practice still persists) was the abandonment implicit in the threat of damnation and hell fire connected with religious instruction. The image of being abandoned into the hands of a wrathful and avenging God who will punish children for their sins is not one to comfort a child. The picture of hell from which there is no escape, a hell which in its description and geographical placement is definitely out of reach of his parents (who probably are going to heaven anyway, and between the two there is a vast gulf) offers about as bleak a prospect of abandonment as any child can imagine. Such a frightful judgment is not wholly a figment of the imagination from the child's point of view when his elders say there is such a place.

Fear of death and the dead. For children who have thus been

frightened, death may come to stand as a symbol of their unworthiness and of the means by which the threat of abandonment is achieved. According to such a view, death is not simply a symbol of annihilation and nothingness, but of the ultimate in loneliness and isolation. Death stands in a context of being wicked, despised, rejected, abandoned, and damned. With such teaching and with a child so taught that he extracts the gloomiest elements from such teaching, religious symbols come to stand for despair rather than hope, hate rather than love, a conviction of sinfulness and unworthiness rather than confidence in a happy faith. The child can only extract a gloomy view of himself from what he is taught, and the rejection implicit in it.

In one of the studies noted above, a six-year-old told of his fear of being abandoned in this manner: He said his mother had told him that because he had been bad (he had quarreled with his sister) a time would come when he would not be able to move the hand that had struck his sister. The mother then described what happened to a neighbor's child. When this child died, the mother said, his hand was outside the coffin, and no one could put it inside, so that the lid of the coffin could not be closed until a priest had struck the hand and then it slipped back into the coffin; in the meantime, "everyone talked about this child, and laughed and laughed, *and this may also happen to you.*"

If a child feels abandoned, left in a space devoid of friendly people whom he can count on for protection and refuge, he has a tendency to fill the empty space. When people are unfriendly toward him he may acquire unfriendly attitudes regarding himself, and so unfriendly characters move in upon his imaginings even though he might also succeed in conjuring up a friendly soul or two. These visitations appear in his fears. When a child is in the dark, isolated, separated, and alone (in a psychological sense), the characters who invade his fears often are these evil ones: threatening ghosts, dead people, walking corpses, "bad guys," kidnappers, and so on. These companions are pregnant with potential harm, but the child comes by them honestly, for there is something sinister and dangerous about psycho-

logical loneliness, and he will seek nearness to someone. The pathetic thing about a child who is afraid in his solitude, alone with his troubled emotions, is that he will people his world with these cadavers and spectral creatures as though it were better to have a corpse for company than to have no companionship at all.

Factors Contributing to Susceptibility to Fear

From an early age there are differences in the extent to which children are frightened or startled. Freeman (1951) has given an absorbing personal account of contexts out of which fears arise.

Actual weakness and incompetence in the face of a situation that demands a response is an obvious factor in the occurrence of fear, so anything that weakens a child may render him more susceptible.

Disparagement. Again, anything that lowers the child's confidence in himself or involves him in situations where he is insecure, or threatens him with failure, or conflict, uncertainty, remorse, guilt, self-disparagement, threatening temptations, or other disturbances in the child's view of himself or in connection with his demands and expectations upon himself will increase his susceptibility to fear.

The poison of disparagement which leads a child to have no trust in himself may be fed to him in many ways. It is being fed to a child if he is held to impossible standards. Reminders of his worthlessness are constantly being given to a child if everything he does is regarded as wrong, if everything is surrounded by "no's" and "don't's," if he is treated with thinly disguised disgust when he soils himself, is endlessly reminded to keep quiet, if other paragons of virtue and cleverness and propriety are constantly (although subtly) held before him, if from kindergarten on he is constantly reminded in competitive school situations that he falls short and is practically no good, and so on. Disparagement can be imposed crudely or very politely, with a lash or a silver spoon. Disparagement may be destructive psychologically even if it seems trivial from a practical point of view. To a child who is constantly reminded of how superior his brother is, or who feels that he is always being compared unfavorably, this disparagement may be a telling thing even if the dif-

ferences between him and his brother are very slight and even if, compared with most other persons, he would stand very high. An example of this is a girl whose brother and sister usually had made the honor roll in school, but she could make it only once in a while, although when she missed it was a near miss. But in her father's eyes, as she saw him and his evaluation of her, one either made the honor roll or one did not count at all. It was no comfort that her grades were almost high enough to qualify her, and that others envied her ability to do so well.

Vicarious dangers. In passing, it may be noted that at the present time children are apparently being exposed more than ever before to vicarious fear stimulation in the form of sensational newspapers, the speedy communication of catastrophe, exciting movies and radio and television programs, and so on. Although children's fears may be influenced by these factors, it does not appear that the fears of children today, as reported by themselves, differ substantially from the fears of children of a generation ago, as reported by adults in recollections of their childhood fears. More important than this or that specific form of excitement that may prevail at one time and not at another is the undertow of factors leading to insecurity, and the threats and other forms of intimidation that carry on from one generation to the next.

Influence of example. Apart from deliberate attempts to frighten, adults may have a distinct influence on a child's fears through the example set by their own fears. By obvious or subtle manifestations of their fears, adults may not only suggest to the child the presence of danger but also weaken the child's conviction of security in their protection. In a study by Hagman (1932), a correlation of .67 was found between the gross number of children's fears and the gross number of mothers' fears, as reported by the mothers. A study by John (1941) of children's reactions to wartime events, such as an air raid, likewise emphasizes the influence of adult example.

Ulterior uses of assumed fears. In passing, it should be noted that a child's display of fear may come to serve an ulterior purpose, as when he proclaims his fear of the dark in order to have company at bedtime or, at a later age, uses a plea of fear of going out alone

to the woodshed, with the result that he gets help in carrying in the wood. There are countless ways in which such factors, both deliberate and unwitting, may play a role in motivating expressions of fear. A person may even appeal to his own fears as a means of condoning his actions, as when he uses this device to excuse his lack of ambition and industry.

Irrational Fears

As we have noted above, many of the common fears of children from an early age are irrational in the sense that they arise apart from any real external danger, or are disproportionate to the actual danger, or persist when danger is past. In addition, many of the so-called fears of children and adults are irrational in the sense that the object or condition that is feared represents a projection, or a kind of external symbol of apprehension, that springs not from the danger presented by the thing that is feared but from an internal condition of uneasiness and distress.

Anxiety

In several sections of this book we have already anticipated a discussion of the subject of anxiety. The concept of anxiety is important for the understanding of children. The ramifications of anxiety are so wide, the defenses against anxiety are so varied, the endeavors a person undertakes to shield himself from reminders of anxiety, or from anything that might activate anxiety, are so versatile that there is hardly any aspect of human conduct and striving that in one way or another does not come into the picture.[5] The concept of anxiety

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[5] If the writer were to list the "big three" conceptions in emotional development that are most useful in understanding the development of the self, and in the development of self-understanding, the choice would be *affection*, which is an essential condition for healthy personality development; *anxiety*, which is the most pervasive reaction to threats against the self; and *compassion*, which is the most profound expression of healthy self-fulfillment.

is among the most useful keys for studying the relationship between the subjective and objective aspects of a child's development.

Nature of Anxiety

According to a dictionary definition, anxiety is a painful uneasiness of mind concerning impending or anticipated ill. The essential thing about anxiety is that it hinges upon an internal or subjective condition. It represents a danger or threat within the person himself rather than solely an external danger. In this sense, anxiety is a disorder within the personality, arising when, for example, there is a clash between incompatible or conflicting tendencies as when a person is torn between conformity and rebellion, resolution and temptation, or between an impulse to love and to hate, or is troubled by reminders of a gap between what he is and what he pretends to be.

Another characteristic often associated with anxiety is that the condition it involves is wholly or partially hidden or unrecognized (or unconscious) in the sense that the anxious person is not clearly aware of the nature of the conflicting conditions in him that make him uneasy. Actually, there are three aspects of this lack of clarity corresponding to the areas of *feeling*, *perception*, and *impulse* which we referred to in an earlier chapter. First, the anxious person's *perception* of what it is that troubles him may be unclear: He vacillates, let us say, between a desire to obey his mother and wanting to rebel against his mother, for he both likes her and resents her but he does not recognize that it is this tension that makes him feel edgy. Second, the *impulse* may be quite unclear, confused, or inconsistent in a situation in which he has both an impulse to approach a temptation and to run away from it, sometimes occurring, for example, when a person is anxious because he is "of two minds" with regard to sex. Such lack of clarity of impulse is sometimes seen in restlessness, aimlessness, fidgetiness, endless coming and going. Third, the *feelings* that come to awareness in anxiety may be quite deceiving. There may be a feeling of anger rather than fear, as when a person sharply resists a reminder of a shortcoming that he desires very much to ignore and instead of having a feeling of fear his feeling is one of anger toward the person who reminded him. There may be a feel-

ing of depression or even what seems to be melancholy and grief, as sometimes happens when a person's conscience bothers him even though he is not quite sure just what it is he feels guilty about.

A special instance of anxiety is what is known as a *phobia*. A person suffering from a phobia attaches to some object or condition (or person) a state of apprehension that resides in him (as when he fears high places, although he "knows" all is safe), or has an irrational fear of dirt, or fears that a bridge might collapse even though he has had ample evidence that it would bear the weight of a thousand people such as he. A phobia involves a kind of displacement or "detouring" of fear on to one object which may or may not have had a frightening meaning (a dog may actually have frightened the child who has a phobia of dogs) but which now is invested with more terror than it could produce as a danger in its own right. According to some writers, many of the "fears" of childhood as represented, for example, in the review in this chapter of the fears reported by children and parents in Figure 5 should be regarded as phobias, because many of these have a large element of irrationality.

One of the marks of an anxious person is that he tends to overdo or to underdo: A slight affront or criticism may send him into a rage, or he may have what seems like an excess of calm when there really is something to get emotional about, as though he were under duress to put a tight lid on his feelings.

There have been many theories regarding what gives rise to anxiety, but this is not the place to review these in detail.[6]

Theories of Anxiety

The most useful concept in understanding a child's anxiety is that it arises from a twofold kind of dislocation, disturbance, or conflict. There is (or there once was) a disturbance in his relationships with people who play a significant role in his life; and as a result of this there is a disturbance in his relationships with himself in the sense

[6] For illuminating discussions of anxiety, see especially W. Lowrie's translations of Kierkegaard's *Concept of Dread* (1944) and *Sickness Unto Death* (1951); Freud (1936); Horney (1937, 1939, 1945, 1950); Sullivan (1947, 1948); May (1950) and Hoch and Zubin (1950).

that there are tendencies within him that clash or are out of harmony in a manner that produces tension and conflict. Another way of saying this is that there are disturbances within the *interpersonal* sphere of his life, involving his relationships with others, and within what has been called the *intrapsychic* sphere—the sphere of the self. Actually, these two conditions are interwoven and interrelated, as is emphasized, for example, in the work of two outstanding contributors to the subject of anxiety—Horney and Sullivan.

An illustration of the way in which a helpless child's struggle to deal with difficulties in his relationships with others may produce conflicting tendencies within him that lead him into further difficulty can be obtained from Horney's account of the development of anxiety.

According to Horney's theories, a chronic condition of anxiety develops when a child has to build a defense against an environment that is unreliable, unjust, and harsh; an environment he does not have the power to change, which curtails his freedom to use his resources, and which undermines his ability to grow in reliance upon himself. He is not simply frightened in this or that particular of his life, but the environment as a whole is a menace, threatening his individuality and interfering with his opportunity to develop his potentialities as a person. Such a forbidding environment exists when a child is unloved and is treated without consideration. In his attemps to deal with the difficulty the child, according to Horney's theory, develops "solutions" which lead to further trouble. Harsh treatment provokes hostility, but it is dangerous for a child to express hostility against the people on whom his life and everyday care depend. While he feels hostile toward them he also needs their help, and so conflicting influences are at work. Instead of fighting and freely expressing his anger he must, for his own safety, resort to other measures. His solutions take the form of defenses and stratagems. But these stratagems, although developed out of necessity, may take a turn that leaves the child at odds with himself. He may, for example, become compliant, make what seems to be a surrender in order not to show or to provoke hostility, and as he grows older he may undertake to live according to the pattern of a meek and self-

effacing person. Or, without entering into open warfare, he may adopt a strategy of moving against people, seeking to exert control, and developing along the lines of an aggressive and competitive person. Or he may adopt a strategy of withdrawing, moving in the direction of being a detached and aloof sort of person. These ways of behaving represent general directions a child's efforts might take, but they will not necessarily appear in pure form.

When a child resorts to such devious ways as these he undertakes to play a role in order to play safe. But any such stratagem he adopts and any role or combination of roles he assumes, other than acting "natural," so to speak, is likely to involve conflict. Instead of being spontaneous, he adopts a "front," and it is burdensome to maintain a front. If he uses compliance as a solution, or aggression, or aloofness there will be times when these strategies conflict with his natural inclinations, for if he were free to express his inborn tendencies (or, as one might put it, free to express his real self) he would be both aggressive and compliant, he would wish to be sufficiently withdrawn to preserve his own individuality but he would also wish to enter into wholehearted relations with others, and so on. Such conflict is unpleasant, and so the growing child who has gotten into this fix adopts further tactics to support, protect, defend, and rationalize the measures he has taken, and this further complicates things. What emerges is a distortion of the self, a kind of pseudoidentity through which the child achieves a sort of integration or unity within the way of life he has adopted as a stratagem for dealing with others. He may even succeed in arriving at an uneasy conviction that this artificial way of conducting his life is quite an ideal thing. He may see his compliance not as a weakness but as a fine streak of gentleness and generosity; his aggressiveness and competitiveness may not strike him as a sign that he lacks reliance on his own strength but as a mark of rugged determination; and his tendency to withdraw from close relationships with others and to remain aloof and detached may be interpreted by him as evidence that he is strong and able to "go it alone."

But this ideal, or "idealized image of the self" as it sometimes is

called, clashes with reality for there is something false about it—it is out of gear with the "real self" that might have developed; it is burdensome for a person to live up to this assumed role, to keep the pose, to live as if he were or had to be something he is not cut out to be. So in this later phase, as was true in earlier phases, the structure of habits, attitudes, and ideas is a precarious one, and he becomes anxious when experiences happen in life that threaten it, or challenge it, or when there is a clash between inconsistent tendencies within this set of concepts and attitudes. Anxiety which at first arose in the child's relationships with others now arises from tendencies within himself. According to this line of thought anxiety arises when anything threatens this "neurotic solution," represented by the superstructure of ideas, concepts, habits, and attitudes built around early attempts at protecting the self from harm (Gershman, 1950).

It can be seen that this account of the relationship between anxiety and distortions that may occur in the development of the self is a theory, and it has not here been documented and verified in detail. Yet it is instructive in illustrating, in theory, the principle that attitudes and concepts a child forms regarding himself may take a turn that makes trouble.

The theory Harry Stack Sullivan (1948) has set forth also involves a concept of anxiety as something arising out of distress in a child's relationships with others and then persisting as a source of difficulty within himself. There is a similar emphasis, directly or indirectly, upon interpersonal and intrapsychic relationships in other theories of anxiety the writer happens to know about, including Freud's theories,[7] although the theories differ in terminology. The concept of alienation within the self is implicit also in the works of Kierkegaard

[7] Freud advanced several accounts of anxiety, although a similar strain of thought runs through them all. His classic contribution is in the little book called (in translation) *The Problem of Anxiety* (1936). One theme, among others, which appears in this account is that of separation anxiety (separation from the loved one), and this same theme appears (in different words) in other theories that emphasize harsh treatment of the helpless child and his defenses against such treatment.

(referred to earlier), which anticipate much that is found in current psychological thought.[8]

In everyday life one can find many illustrations of the way in which a child or an adult is troubled in a manner ranging from fear and dread to mild or vague uneasiness by reason of conflicting tendencies, such as occur when, as we say, he is "of two minds" or "torn within himself" or when troubled in his conscience or even simply, as the person himself sees it, unable to make up his mind. When the issue is an open one, and clearly recognized, as when a youngster tosses between telling or not telling his mother that he ate up all the cookies she is saving for some guests, the struggle might be a tough one, but it would not be called anxiety as we have here used the term. However, when the issue is not clear and contains irrational or "unconscious" elements the definition of anxiety would apply. In the example that is given there might be such hidden elements which make of this conflict something much more than a struggle about cookies. The eating of the cookies might have been quite an incidental feature in a larger drama in which the child's role is not, to him, at all clear: He may have eaten the cookies, and done a number of other corresponding things, because of vague feelings of being abused coupled with a desire to take revenge; the cookie episode may be one of a series in which, for one reason or another, the child is "always getting himself into a mess," as though unwittingly he were looking for punishment without realizing it.

Values of Fear

Any condition that mobilizes an individual's energies and puts him on the alert in the face of danger is obviously of tremendous value as a protection against possible harm. Even apprehensions concerning dangers that are never likely to happen may have a salutory effect. Yet, it can be observed that fear often produces commotion and consumes energy without helping anyone. The bodily

[8] This statement is based largely on *Sygdommen Indtil Döden* (translated by Walter Lowrie as *The Sickness Unto Death*, 1951) and by a work which in its title touches more directly on the idea of anxiety, *Begrebet Angst* (translated as *The Concept of Dread*, 1944).

changes accompanying fright presumably help a person to face an emergency and give him greater strength and endurance for fight or for flight (Cannon, 1929). However, often in modern life an issue which one fears cannot be solved by using one's fists or taking to one's heels. If a worried student could pass a hard examination by outrunning his instructor or by throwing him out of the window, the energies mobilized within him would be well suited to the occasion. But civilized life being what it is, the student must sit down and write with a trembling hand, even though he may be better prepared to push stiff uppercuts than to push ideas through a pen. Most of the emergencies in modern life call for quick wits rather than for strong fists. And most of the apprehensions a child has concerning himself and his relations with others are not based on conditions which an extra spurt of fear can solve.

Overcoming Fear

As already noted, many fears are overcome in the normal process of growth. As a child lives and learns he comes to take more and more things in his stride. In adult accounts of childhood fears that since have been overcome, there are many such statements as "I outgrew it," "I learned how to take care of myself," "After a while I knew how to handle it." Sometimes, of course, a fear vanishes or recedes when the apparent cause of it has been removed, as when a child who fears bigger boys in a certain locality moves to a new neighborhood.

Many apprehensions wane as the individual has a chance gradually to face and to cope with the feared situation. An interesting account of some of the signs of fear or uneasiness shown by children when facing a new situation and of the decline in such signs as the children become accustomed to the situation is noted in a study by Slater (1939) of children during their first few days in nursery school. Most of the children showed some signs of apprehension at first. There was a marked decline in uneasiness after the first day, and outstanding emotional disturbances did not appear after the first visit, except in the case of the very young children. Slater points out

that the degree to which a child openly revealed his concern on his first visit did not indicate how well or how soon he would adjust to the new situation: ". . . children who cried loudest on their first morning might often be the happiest later on, whereas some who were tearless on their first morning sometimes continued for days to be rather solemn and none too happy." The youngster who is most free to express his feelings when he is troubled may be the one who is best able to come to grips with his trouble.

Attention to underlying causes. A first principle in dealing with fear is that one should look not simply at the specific symptoms but at the circumstances and conditions surrounding the fear. If a child's fear has emerged from a setting of insecurity, uncertainty, demands that go beyond his powers, inconsistency or confusion in the discipline to which he is exposed, threats, severe punishments, and various means of intimidation, it obviously is more important to look for ways in which such conditions can be remedied than to deal directly with the child's symptoms of distress. As long as there are underlying difficulties, the elimination of one particular expression of fear may shortly be followed by other fears.

Practical steps. The second consideration is to try to help the child himself to deal in a practical way with the situation that scares him. This means helping him to face the tangible "cause" of his fear. There have been many studies dealing with this matter.[9]

Among practical steps that parents and other adults have found to be useless, or rather useless, or perhaps worse than useless, are

1. Ridiculing the child for being afraid.
2. Ignoring his fear.
3. Forcibly compelling him to face the feared situation.

The first important step in dealing with a frightened child is to help him. Except in circumstances where a child quickly discovers he can take care of himself it does no good, and may do much harm, to let him remain in the toils of his fright. *Fear is not a cure for fear* any more than pain is a cure for a toothache.

[9] See, e.g., Hagman (1932); Holmes (1936); Jersild and Holmes (1935); and Jones (1924).

Among practical steps that sometimes have proven to be helpful are the following:

1. Trying to talk a child out of his fears, explaining there is nothing to be afraid of, and so on. This sometimes helps if the explanation actually clears up the reason for the child's fear.

2. Setting an example of fearlessness. Such an example, among other things, may bolster the child's assurance in the protection of another person, at least for the time being; carry the suggestion that there is nothing to be afraid of; illustrate techniques for handling the feared situation; and set a standard of courage for the child to emulate. The example of fearlessness is not so likely to succeed, however, if it involves the use of abilities and techniques that are beyond the child's capacities. Nor does an example of courage help if it merely strengthens the child's conviction or fear that he himself is a coward.

In many situations the example of fearlessness set by other children may have a good effect. A child will frequently follow other children into activities he would be afraid to undertake if he were alone. Sometimes children as a group will venture into situations that each would fear if he were alone (such as entering an abandoned barn that may be "haunted"). Sometimes the mere fact of watching the example set by another child will have a helpful effect, as when a child permits himself to be tossed into the air by an adult after having observed that another child laughingly accepts such treatment. It often happens that a child subsequently shows no fear after thus having been initiated into a situation and having discovered that it is harmless (or, better yet, after having discovered that he has the power to cope with the situation).

The importance of the example set by parents and others who play a significant psychological role in the child's life does not consist simply in the fact that they set a model for the child to follow but in the fact that they constitute, in a sense, elements of security and insecurity in the child's environment. If a parent is a person who faces the dangers of life in a forthright way, without pretending that he is never afraid, he offers in his relationship with his child a quiet source of strength. But if he is burdened by anxiety, so frightened by

the issues in his own life that he inflicts his apprehensions on his child to a burdensome degree, then he constitutes an element of uncertainty and weakness in his relationships with his child. His anxieties are visited upon his child, for example, if he worries about the child's safety to an extent that seriously curbs the youngster's activities, not so much because he is convinced that harm might come but more because he is mortally afraid that if an accident *should* happen he could never forgive himself for letting it happen: In other words, he inflicts on his child his apprehensions connected with his guilt and irrational expectations upon himself.

It is the quality of the relationship with the child, built upon what the parent is as a person, that counts most in determining whether his influence will be to aggravate or to minimize his children's tendency to be afraid. Compared with this, the little example of fearlessness Papa might set when he plunges bravely into the deep water, or strides courageously out to drive off a snorting bull, is a fine gesture which should be properly appreciated, but if it is just an isolated act, it has little meaning.

3. Another procedure that has been found to work in some situations is to try to effect "positive reconditioning" by presenting the feared stimulus with an attractive or benign stimulus. This method is likely to work best if the unfeared stimulus is not simply presented side by side with the feared event but if the latter can be incorporated into a larger setting that is reassuring.

4. The most effective method of dealing with the tangible aspects of fear is to help the child by degrees to come actively and directly to grips with the situation that scares him, to aid him in acquiring experience and acquaintanceship with it, to aid him in acquiring skills that are of value in coping with the feared event. Although skill alone may fail to root out fear, in general it may be said that, other things being equal, the child who has acquired the widest range of competence and the best array of skills is likely to have fewer fears. Such competence and skills include not simply proficiency in the motor activities that are involved in everyday play—such as opening doors and switching on lights—but also competence in ways of dealing with other persons (meeting and greeting and

fraternizing with them), and intellectual skills in the form of information and knowing how to proceed.

The value of competence in dealing with something that might otherwise be frightening comes not solely from the fact that the child has an effective practical technique, but it arises also out of the fact that such competence will influence a child's attitude toward his own capacity for taking care of himself.

Frequently a child will exert himself to improve upon his competence in coping with a feared situation. Some children are almost pathetically eager to "practice" activities that will help them to overcome fear. An example of this was given by a boy who was afraid of heights, and who repeatedly was seen to arrange boards and boxes so that he could climb to higher and higher altitudes on more and more precarious footing. On one occasion, when he had succeeded in going up and down the whole length of an unstable inclined board, he gave a shout of triumph. Another example is the case of a child who was afraid of being alone in a room; while "practicing" to overcome this fear, he first asked his nurse to stand at the end of the hallway as he went into the room alone, then to stand out of sight in another room, then to go to a remote part of the house. However, frequently when a child is afraid he will not have the ingenuity to devise such techniques without adult help, and the techniques he does devise may not help him to master the underlying difficulty.

The principle of dealing with fear by helping the child to cope directly with the feared event was used in an experimental study by Holmes (1936). In one series of observations, Holmes found that of twenty children in a nursery-school group, fourteen were initially afraid to enter a strange, dark room to recover a ball which the experimenter had thrown into the room, seemingly by inadvertence, while playing with them in an adjoining large room. The children were then familiarized with the place, and after relatively few sessions, thirteen of these fourteen children went into the room without hesitation, turned on the light, and recovered the ball.

Another series of experiments dealt with two children who were afraid of walking the length of a plank that was raised above the

ground. After eight brief sessions, over a period of about a month, one child, who at first had clung to the experimenter when placed at even a low altitude and had whined and protested that she would fall and get hurt, happily walked back and forth the length of a board raised 6 feet above the ground, and she performed the same feat when the apparatus was moved to the playground. Even the sight of another child who had tried to climb a ladder and had fallen and cried did not seem to deter her.

Another child also made progress, but less rapidly, and then he relapsed. This relapse occurred at a time when his nurse left the household and his mother was in the hospital having a baby. The whining and infantile responses which he showed in the fear experiment were similar to behavior that also was prominent at home, and it appeared that, far from having any strong desire to overcome his fear, he used the fear situation as a means of getting attention and contact with an adult. The procedure of simply helping the child to acquire competence in dealing directly with a specific feared situation did not suffice to overcome a fear that had a certain amount of utility in his scheme of living and that was deeply interwoven with other emotional difficulties.

It has been noted that an active approach may be helpful even in overcoming fears of imaginary dangers. One child in a study cited above was afraid of an imaginary dog, which hounded him, troubled him when he was alone, and haunted him in dark places. When his resourceful mother observed this, she set out to help him. She first watched the child in his make-believe play. Gradually she entered into his play herself and joined the child in games of "let's pretend"; gradually, also, she began to introduce the imaginary dog into the make-believe play. In time, the child took the dog with him into closets and elsewhere, all as part of the play pattern, and eventually he no longer appeared to be bothered by the dog.

Much of the value of the technique of helping the child to cope directly with his fears no doubt lies in the fact that in the process the child benefits from the companionship and participation of the adult. His burden of fear is being shared. He is being told, in effect,

that he need not be ashamed of being afraid and that he is not, at least for the time being, defenseless and alone.

One value of actively coping with a feared situation is that through it the youngster may get a changed conception of himself. When a child, for example, has become able to go by himself to a remote part of the house he once feared, something more has happened than just a way of coping with a specific fear: He has not overcome an external danger but he has overcome an internal weakness. If he now goes confidently and gladly to a place he once feared he is, to a degree, a changed person.[10]

Prevention of Fear

Many of the techniques that can be used in overcoming fear may likewise be adapted to the prevention of fear. In addition, steps frequently can be taken to forewarn or forearm the child, so that he may be prepared against a sudden or abrupt happening that might cause fear and, by degrees, be prepared for a new situation (such as having a trusted adult at hand on his first exposure, letting him make his way into a new play group at his own pace, and letting him become accustomed to the doctor as a kindly person before a painful treatment is begun).[11]

Because many events are unpredictable and a child's reactions to new situations are likewise unpredictable, it would of course be impossible to undertake a thoroughgoing program of forewarning and

[10] Far more important than specific techniques in helping children to deal with their fears and other emotional difficulties is the attitude the adult shows and the willingness and patience he shows in helping the child to face his own issues and to understand himself. This process of helping the child means, as we have stressed elsewhere, that the adult must have enough courage to examine the implications, for him, of the child's emotional difficulties. There are references to this point of view throughout the book, but see especially comments on hostility which follow in the next chapter and the comments offered in the discussion of Emotion as a Sentinel and of the Expression, Acceptance, and Examination of Feeling in Chapter Nineteen.

[11] Burlingham and Freud (1949) discuss this concept of helping the child to prepare himself for a trying circumstance in connection with their account of the reaction of children in England to separation from their parents during wartime.

forearming the child. Furthermore, the very steps taken to prepare a child for a situation that might frighten him might even have effects just opposite of those intended. In the observational studies of fears mentioned above, one of the most acute instances of terror—involving an outcry, hasty flight, and prolonged crying, followed by moaning and trembling—occurred when a child first met a badly crippled neighbor, after the parents had previously taken some pains to prepare the child for the event. What a child is told in preparation of an event, and the very fact that his elders go out of their way to forewarn him may, under some conditions, endow an event with terrifying qualities and thus aggravate rather than forestall a child's fear.

CHAPTER ELEVEN

Emotional Development (III)

Anger and Hostility

A child's anger, like an adult's, frequently gives an illuminating glimpse of his personality, but his anger is often disguised or concealed.

There are developmental links between anger in childhood and in adult years, but one difficulty in studying anger is that from an early age children are made to hide their anger, as though the eleventh and greatest commandment were this: Thou shalt not show anger, nor even feel it. One reason for putting a curb on rage is that an angry child usually is rather unpleasant, and one reason he is unpleasant is that his anger, or his tendency to be angry, presents a practical problem or calls attention to difficulties his elders would rather not be reminded of, including difficulties the adults themselves have in handling their anger. Adults also hide their anger to a very great extent, partly to avoid trouble from others and partly also because an outburst of forthright anger might betray something about themselves. To accept the reality of anger and to face the implications of anger require a great amount of cleverness but an even greater amount of courage. It takes more courage than some children are able to muster, for in the lives of many children rage is a source of great danger. It also takes courage for an adult to look beneath the disguises of his own anger.

Anger can be aroused in young children by forcible restraint, interference with movement, blocking of activities that are in progress, by anything that thwarts a child's wishes. Frequently anger occurs as a response to an accumulation of annoyances. The younger the child,

the more his anger will turn upon an interference with his physical activities. As he grows older, the conditions that cause anger include not only actual bodily restraint but also interference with his possessions, thwarting of plans, purposes, expectations, and criticism of his ideas or faults, and anything that threatens cherished ideas he has about himself.

Anger, like fear, is influenced by factors of both learning and maturation. As was noted in Chapter Three, during the first few days of life such interferences as having his arms pinned momentarily to his sides or having his nostrils closed, so that breathing is prevented for a few moments, do not especially seem to arouse the ire of an infant. When the infant does protest, his movements are likely to be uncoordinated and display no clear pattern of rage. As he grows older, he becomes more responsive to interference and he shows more specific reactions of a defensive or offensive sort. After the child's capacities have improved through growth, learning plays an increasingly important role in determining the manner in which he will express his rage and the conditions that excite him. Throughout childhood, however, there are individual differences in the irascibility and violence of children that seem due in part to inborn factors. Moreover, at all stages of growth, an individual may, when acutely enraged, "go to pieces," strike out blindly, and revert to diffuse, uncoordinated reactions.

The infant's anger, like that of an older person, often occurs as the result of his own ineptitude. He may seek, for example, to put a spoon in his mouth but, failing because he makes a broadside approach, become angry in the attempt. He may be able to pull himself to his feet before he has acquired the ability to ease himself back into a sitting position, and as he grows tired become angry. Even though the child is not provoked or obstructed by others, he is likely to have many anger-producing experiences in connection with his own activities.

In children, as in adults, anger due to the person's own foibles or mistakes will often be ascribed to something external. An example of this is offered by a seven-year-old child who was very fond of candy and who had had cavities in her teeth. On one occasion she heard

adults discuss a report which indicated that sweets helped the growth of bacteria that cause tooth decay. That evening after she had gone to bed when a request for candy was refused by her father, her temper flared more than was usual when something was denied. It appeared that her anger at her father was in part a projection of anger with herself for wanting candy in spite of its harmful effects.

Changes with age in the expression of anger. A description of conditions which promote anger and of changes in the child's anger behavior as he grows older is given by Goodenough (1931b), who studied children between the ages of seven months and eight years. Among other things, Goodenough noted that as the infant grows older his expressions of anger become less random and more directly aimed at something or someone. Before the age of one year, his outbursts are chiefly explosive expressions, not well designed to remove obstacles or to attack an enemy. But by the age of four, almost half of his expressions are aimed at the object of his wrath. With this change there comes an increase in retaliative behavior of a kind apparently aimed to secure revenge for an injury. The most frequent single expression of anger in early childhood is crying, but this diminishes with age. Threats make their appearance between the ages of two and three and increase in frequency thereafter.

Indirect forms of retaliation and attack observed in Goodenough's study took the form of such activities as the overturning of furniture and the doing of acts previously forbidden, although distinct from the immediate cause of anger. One child of three, when angry, sucked his thumb in a conspicuous manner, although thumb sucking was not his usual habit. Other indirect forms of aggression were raucous laughter and the refusal to speak. One child voiced her resentment toward her mother by such a remark as "I wish I had a mother like Mary's." In some cases, children expressed their anger by attacks upon themselves; for example, a child was observed to bite himself when angry. Aftereffects of anger were almost twice as frequent and prolonged in children over the age of four as in children under four.

Individual children may go to quite extreme lengths in showing anger, such as holding their breath or vomiting, or banging their

heads against a hard surface. At the age of about four some children resort to threats, such as threatening to run away, or to chop off the offender's head, or to chop his house to pieces. Many youngsters go through a period of threatening to kill when angered. In expressing anger, a child will frequently vary the nature of his outburst under different circumstances. He is more likely, for example, to cry at home than at school (Ricketts, 1934) and to hit and kick when angered by another child than when angered by an adult.

Anger directed against self. Whereas children, like adults, manage to take some of the sting out of anger by blaming their anger-provoking difficulties on other people and on external circumstances, they also show a good deal of anger with themselves or anger directed against themselves. Examples of self-punishment (biting self, head banging) are given above. In addition, children sometimes express anger against themselves in so many words, such as "I hate myself" or "I feel like killing myself." Similarly, they may express self-disparagement in a milder term, such as "That's just like me" (when they make a mistake or have an accident).

The concept of self-hate is not a particularly pleasant one, but it is useful in understanding emotionally disturbed adults, and it also is helpful in understanding children. It is illustrated by various forms of self-disparagement like "running oneself down," variations of the phenomenon of masochism, and also in proneness to accident, a compulsive tendency to get into trouble (e.g., "He's always bringing trouble on himself," "He asked for it," and so on). This phenomenon of anger against self has not been studied systematically in long-term research with a sampling of typical children.

Factors contributing to susceptibility to anger. In Goodenough's study (1931b) there was evidence that children were slightly more disposed to anger after a restless night. They were more irascible also on days when regular bowel movements had not occurred. Anger outbursts were especially frequent just before meals. Children who had records of illness tended to exhibit slightly more anger. Outbursts increased somewhat, on the average, when there were adult visitors, and they increased to a greater degree when there were child visitors in the home. Also, there was a tendency toward a greater

frequency of anger in children who had more than two adults in the household. The more adults in the home, the more occasion for everyone to get into everybody else's hair.

Parents whose children showed many outbursts of anger more frequently attempted to calm them by granting their desires, by removing the sources of trouble, and by coaxing and soothing them than did parents whose children showed less anger. The difference gives a clue to many anger outbursts. When a child gets what he wants, his anger is successful; but if he fails to get what he wants, his anger is abortive and he will have less reason to resort to anger as a means of solving a problem another time. Threatening was more often reported as a device for meeting the anger of the more irascible children, whereas spanking was more often resorted to by parents whose children had few outbursts. The difference here suggests that a study which deals only with overdisplays of anger will probably fail to take account of many situations in which a child is angry but for one reason or another (including fear of retaliation) he does not show it.

At all ages after two years boys displayed anger outbursts more frequently than girls, but the number of children included in the study is somewhat too small to support final conclusions concerning this difference. The difference is accounted for in part, no doubt, by the fact that parents ignored the girls more often than the boys when they were angry and more often used bribery, spanking, threatening, and isolating as a means of coping with the boys' anger. The finding that boys tend, if anything, to show anger more openly than girls in the home is in keeping with other findings indicating that they also are more openly aggressive outside the home. The observations in this study suggest that mothers are perhaps more at a loss in dealing with an angry boy than in dealing with an angry girl. If such anger-provoking methods as spanking, bribery, or ignoring are used more with boys than with girls we might expect the boys to develop toward a greater show of anger, whatever may have been the original difference, if any, between them and girls in their tendency to become angry.

Anger is more likely to occur in homes where parents are over-

anxious and concerned with whether the child's behavior is "good" or "bad" than in homes where parents are tolerant and capable of looking upon the child objectively (Goodenough, 1931b). Anger is more likely to occur also where there is worry and anxiety or lack of a sense of humor. Furthermore, anger is often provoked by the critical attitude of parents who tend to nag and recriminate rather than to view each anger episode as a thing of the past when the event is over. Consistency in methods of discipline appears to be a more important factor than the strictness or lenience of the disciplinary procedures that were used. Some methods, such as bribery and letting the child have his own way, may bring an outburst to an end but pave the way for future outbursts.

Conditions Influencing Susceptibility to Thwarting and Frustration

The effect of the child's physical and physiological condition on his susceptibility to anger has been noted. The hungry infant may be enraged if his bottle is withdrawn, but the same child, when sated, will himself push the bottle away. Moreover, the hungrier a child is, the more prompt his anger is likely to be (Dollard, *et al.* 1939). Similarly, a reminder of chores yet undone is likely to be more annoying to the child when physically tired than when he is well rested. In like manner, the extent to which something in the child's path represents a thwarting obstacle depends in part upon the child's own strength and endurance.

At later age levels, as at earlier levels, the individual's irascibility is likely to be greater when he is hungry or tired. Accordingly, it is a good rule not to start an argument before mealtime. A few mouthfuls of food may do more to settle a dispute than the best of logic emanating from an empty stomach. Late afternoon, before dinner, is a time when many adults are especially disposed to be angry, although others favor the time between getting out of bed and breakfast as a period when a little irritant can provoke a big rage. It would help if such persons could realize that a soft-boiled breakfast egg, like a soft answer, will turn away wrath.

Thwarting and frustration depend also to an important degree on what the child has at stake—his plans, desires, hopes, the level of his aspirations, his notions as to what others expect of him, and his ideas of what he might properly expect of himself. Many factors influence the mental set or attitude which determine whether or not the child will regard a circumstance as a challenge.

The level of the child's abilities and, in time, his ideas as to what to expect of himself will have an important bearing on whether or not a happening is potentially frustrating. When he is able, or thinks he is able, to walk by himself on rough ground, he may be angry if someone tries to take his hand, whereas earlier, when this feat was beyond what he expected of himself, he was glad to take a hand or to be carried (and even later, when the rough terrain is no longer a challenge, he again may be quite glad to hold a hand or to get a lift).

What constitutes a challenge and a potential frustration not only varies as the child matures but also varies from child to child, and it varies for the same child in different circumstances.

In countless ways the child may thus exhibit more or less vaguely defined boundaries within which he is on his mettle and within which he can have the gratifying experience of success, or feel thwarted and frustrated by failure. He exhibits what might be called a margin within which he is sensitive, an upper and lower threshold, so to speak, within which he holds himself on trial. If he fails, is blocked or thwarted within this range, he may variously feel remorse, guilt, and anger, and when angry experience various aggressive impulses toward himself or other persons and things.

Apart from conditions in the environment which might block and thwart a child in connection with his everyday activities there are many circumstances connected simply with being a child that involve frustrations. These are likely to be more acute for a child who is not loved or wanted, but they are likely, to some degree, to cause difficulties for all children.

Discipline. In an earlier chapter we mentioned that for the child's own protection and comfort, and for the good of the group, it is necessary for him to undergo a considerable amount of discipline.

This means that he is not free in all things to behave as he would if left entirely to his own accord. Sooner or later there are demands he must follow, rules he must conform to, things he cannot be allowed to do, and so forth. Even under the best circumstances many frustrations are likely to arise.

Reminders of dependence. From an early age the child tries himself out and seeks to do things for himself. But he will have many reminders of his dependence and of his inability at any time to achieve complete independence.

Awareness and reminders of limitation. From an early age there will be many occasions when a child is reminded of his own limitations. It is not simply that his reach will at times exceed his grasp, and that he will observe that he cannot do what he would like to do or what others stronger than he can do, but he may even begin, at a fairly early age, to be aware of occasions when he is not living up to his own expectations. For example, he may feel displeased with himself when caught doing something he feels ashamed of, such as crying at a minor hurt or showing temper in the presence of a stranger or pulling the cat's tail. In other words, the child is exposed to anger at himself as well as to anger at others or at things.

Unmet expectations. A child may be angered not only because he fails to live up to his own expectations but even more because others do not deliver as he has expected.

It is perhaps inevitable that a father and mother will become sources of frustration for a child—as well as sources of comfort and help. They are powerful figures who, as the child sees it, sometimes stand in his way. When they say no, they are like barriers between the child and the fulfillment of his desire. A good father and mother not only stand between the child and his desires but they also at times stand between the child and himself. For just as the parents are the child's source of security they are also the people from whom he is most likely to receive lessons concerning his own limitations. It is they who openly or by indirection remind the child that his grasp is not as great as his reach, his word is not law, his wishes not a fulfillment. Such reminders are not pleasant even if they are given with good grace and with good intentions. Parents

inevitably are involved in the beginnings of that life-long struggle through which a human being discovers not only what his resources are but also what his limitations are.

As the child grows older, his parents may disappoint him as they gradually change some of the practices they used when he was a helpless and defenseless infant. As he becomes more able to fend for himself they do not leap to his side so quickly when he calls. They are able to tell in many situations whether his cries mean real distress or are meant to commandeer attention. There may be bigger and more dramatic moments when parents no longer are at his beck and call, as when he goes to nursery school. In many situations, large and small, a child may meet a defeat in what he expects of others (including defeat of expectations he has taken for granted), and this may leave him feeling somewhat abused.

According to one view, a child actually goes through a period when he regards himself as omnipotent. The theory is that when he is not yet aware of himself as a separate person, distinct from his mother or nurse, it is as though he achieves the satisfaction of his wants through his own power—as though he has the power to supply the breasts and the bottle and all the other services he receives. But then he discovers, according to this view, that he is not omnipotent, and he feels rebellious and resists the discovery of his dependency.

Actually, to say of the young child that he has a feeling of omnipotence probably ascribes to him a more grandiose state of mind than a child so young is able to entertain, but at least we may recognize that in the process of transition from being cared for by others to having to take more and more responsibility for himself a child may be rather baffled and he probably will be quite actively annoyed by the delays and reminders of his own lacks.

Hostility toward the "Authority Figure"

In view of such circumstances as the foregoing which arise when conditions are good, and of added difficulties arising when parents are unreasonable or anxious, it can readily be seen that the growing child might begin to harbor the kind of quiet and chronic anger

found in persons who feel abused, unfairly treated, or at least feel that they are treated with less consideration and respect than they deserve. If now, the child also is punished, and can never effectively fight back and "get even," feels discriminated against, feels that his parent or some other parent figure who stands over him not only is unreasonable and mean but actually dislikes him and is actively against him, then a strong grievance is in way of becoming established, and the child may have the beginnings of a deep grudge, a feeling that he would like to take revenge (even though he is helpless to do so). If this attitude becomes really acute, and nothing is done to ameliorate it, the child may develop an unresolved attitude of hostility.

If it is the father who expresses authority of the sort that, from the child's point of view, restricts and thwarts him, the child may acquire an attitude of opposition to the father. But the mother, uncle, or aunt—or even a teacher—may serve as the object or prototype of such opposition. There is evidence of a carry-over of such opposition when a child, for example, is unduly stubborn and negativistic, when he resists violently some little suggestion or request, or feels deeply hurt when some very mild criticism is directed at him by these parent figures. When he overdoes in this way, in a manner that is out of proportion to the occasion, we may assume he is not responding just to the present attack or suggestion but that an attitude carried over from the past is influencing him.

As we noted in an earlier chapter many children go through a period of active resistance to figures representing authority, and then many of them seem to subside. When this active resistance wanes it may mean that the child has more or less resolved the struggle, so that he no longer needs to overact or overdo. Or it may mean that much of the attitude of resistance remains but is not as openly or definitely shown; the child may still harbor an attitude of resistance and even attitudes of defiance, hostility, and hatred toward the authority figures.

In later childhood and adult life evidences of resistance and even active antagonism to authority figures often appear. When adults seek psychological help one condition they often need to face is

hostility toward one or both of their parents. Some people when they first seek psychological help are not even aware of their hostility for it may be so carefully disguised and the person may be so impressed by the loyalty and affection he feels for the parental figures (which may exist side by side with hostility) that he has not recognized his hostility. Anything that reminds him of it may be disturbing. The idea that a person may have been "a rejected child" or, whether or not actively rejected, may have built defenses like those of a rejected child would probably come as a dreadful jolt even though many of the person's operations as an adult, against people in authority or symbols of authority, seem to be built on this very premise.

We can see evidences of reactions to the father figure (using him now as our main symbol) in many reactions of so-called normal people in everyday life. We see it, for example, in teaching when a student is extremely sensitive to criticism from a teacher—reacts in a way that is quite out of keeping with what was intended—suggesting that something in his earlier relations with his elders is now distorting his perception. We can see it also at times when a student overacts against the idea of doing some work (as though an unreasonable father once more were pushing him around) or argues and fights beyond anything that is reasonable when something on his examination has been marked wrong. The overreaction probably means that attitudes that had their origins in earlier experiences with a father figure are being directed against the teacher.[1] The attitudes toward the authority figure appear in other ways. There are some adults who are chronically opposed to anyone who stands as a symbol of authority, be he an elected official or the congenial dean of a college or the head of a department or the president of a corporation. The reaction against the authority figure may appear when

[1] Of course this also works in the opposite direction. The student may view the teacher with the friendly and affectional feelings he has toward his father or mother, and this may lead him to overestimate the teacher's benign qualities. The broadest statement of this principle is that a child's perception of his teacher will be influenced not simply by what the teacher is, or the way he looks or talks, but by what the child already has a tendency to look for or to expect or to avoid seeing.

an adult acts as though it were important for him to outwit anyone who is in authority, or when he always takes sides for what he regards as the underdog. Some people act toward policemen as they might have acted toward their fathers when they were younger.[2]

Suppression of Overt Signs of Rage

As a rule, the young child has no sooner acquired the ability to stage a good performance of rage than he must begin to learn how to suppress it. Through social restraints and partly through his own discovery as to what is the best policy, he must learn not to cry, bite, pinch, kick, hit, destroy, tear, and attack by physical means when his ire is aroused. During a period of one year, at the preschool age, a notable decline can be observed in the relative frequency of crying and in hitting and other forms of physical attack, and an increase in the use of language, scolding, and fussing. Studies of anger in adults by Richardson (1918), Gates (1926), and Meltzer (1933) show how far this learning has gone by the time a person reaches maturity. In several hundred occasions of anger described by adult subjects, there were only a few good fights. The adult has learned to smother most of his violent expressions, even though he may still have a strong impulse to do physical injury to the offender or to scream or swear and make a scene. Of course, this does not mean that the anger is disposed of.

Devious Manifestations of Anger

As a person grows older he learns to use many devices as a substitute for overt attack. A frequent substitute is the use of language in the form of sneers, innuendoes, or violent and abusive phrases. The angry person may resort to roundabout methods of overcoming the object of his rage. He may try to belittle his opponent in the eyes of

[2] Slavson (1952) describes how later in life persons fit individuals and symbols, particularly those representing authority, into the "father image" and discharge against this image the aggression originally felt toward their parents. According to Slavson, it is with these primary hostile feelings that the treatment of emotionally disturbed people predominantly deals.

others, to overcome him in competition; he may rejoice in tragedies that befall his adversary, lay plans for overcoming him, imagine himself superior, resort to ridicule and irony and barbed witticism, or imagine situations that will bring sorrow upon his foe. The latter expression occurs when children imagine themselves as dead and in the process of being buried while secretly relishing the tears of remorse that wet the cheeks of those who have abused them.

In extreme cases, anger may be expressed in the form of cruelty, active revolt, vandalism, thievery, and other antisocial acts. Likewise, as noted, a child may discover that he can "get another's goat" by using "bad" words, by using ungrammatical speech, or by mannerisms and little acts which in themselves are relatively harmless but which cause irritation. A whisper behind the offending person's back may take the place of a blow on his chin, or the attack upon the object of one's anger may be cloaked in humor or take the form of satire. The angry person may claim that his indirect attack upon someone else is not due to personal feelings but is to uphold a cause or a principle. Expressions of aggressive impulses may range from violent attack to a demeanor of calm and frigid politeness. They may range from direct cruelty to a show of kindness, as when a child's generosity toward a playmate is calculated to make another playmate feel badly.

Children often are frustrated without revealing any aggressiveness. There are times when a child's way is blocked, yet he is silent, his wishes are not granted yet he does not protest, he is made to sit still in church or in school, but he does not reciprocate by "accidentally" scraping his feet on the floor or dropping his books. He may feel bitter, even though he says or does nothing, but if he is subject to such frustrations over a long period of time he will acquire attitudes of hostility which sooner or later, in one form or another, express themselves.

There are many people in the adult world who still are struggling with hostilities that arose from frustrations in childhood. Some of these hostile adults may be among those who were very mild, polite, self-controlled little children. They may include the "nice" little girls who never sassed their mamas, or stuck their tongues out at

their teachers. They may include some of the "good" boys at school who never broke a window or tripped a schoolmate in the aisle or did anything to make the teacher feel uncomfortable but who now, as adults, show hostility against many things, and, in passing, against the school by voting against every appropriation, or by ridiculing "old-maid school teachers." They may be the pious young fellows who would not dare to fight the Sunday School teacher or the pastor or the deacon when they were required to sit through hours of church services quite unsuited to their understanding, but who now, as adults, never go to church, and instead, every now and then make abusive remarks about the church.[3] But even so open a display of anger may not appear.

Friendliness as a front for anger. In his efforts to suppress his anger an older person may go so far as to display just the opposite sentiments. Instead of showing hostility toward a person whom he basically dislikes, he may show friendliness and appear to be very concerned about the welfare of this person.

Such a cloak of friendliness may be assumed quite deliberately, as when a person "goes out of his way to be nice" to a person he doesn't like. When children are old enough to understand some of the polite disguises for bitter competition, they may be able to take this line, without necessarily fooling others, or themselves. Again, a display of unusual friendliness may be a delayed reaction to anger, as a kind of peace offering and effort at atonement. A mother may not suspect, for example, how enraged her child was when she refused him permission to go swimming until he comes, an hour or so later, penitently bringing her a flower or a glass of cold water or some other token of regard. Here again, the process may be quite open, with no significant deception of self or others involved. However, there may be a more severe kind of self-deception when a youngster develops a set of polite manners, and as he moves into adult years, uses them more and more as a habit in which he begins to take

[3] As this was being written, the newspapers told of murders that had been committed by a young man who, as a boy and youth, was the "politest boy in town."

a certain amount of pride, forgetting or failing to remind himself that he is acting a part without feeling the part. This may be the situation with a person who is elaborately polite when he meets people, or serves as a host, even though secretly he has no use for them or even despises and detests them.

In most social circles there probably are many such situations in which a friendly façade conceals attitudes ranging from unconcern to deep dislike and even hatred. In the usual superficialities connected with parties, teas, receptions, and other gatherings the polite masquerade goes on unrevealed, except at times when ill will breaks through in the form of gossip.

Even this kind of duplicity may be innocent enough from a psychological point of view (just as it is perhaps inescapable from a social point of view). But it amounts to a kind of psychological disturbance when (a) the person who wears the mask of friendliness does so indiscriminately, unaware of what his real feelings toward others are and unable to make a distinction between hollow and sincere relationships and (b) when he becomes convinced (although perhaps never thoroughly) that the friendly person he appears to be is not a pose but is his real self.

Unfortunately, we do not have systematic developmental studies which trace and document from year to year the process by which a child moves into adolescence, youth, and adulthood, gradually acquiring and consolidating a view of himself as a benign person while ignoring or succeeding in losing sight of the fact that he also is subject to anger, spite, vindictiveness, and perhaps hatred toward others and toward himself.

Finding a scapegoat. When a person is not free to direct his aggressive impulses toward the person or circumstance that provoked him, he may succeed in directing them toward someone or something else. He may try to find a scapegoat. In a study by Lewin, Lippitt, and White (1939), referred to in Chaper Eight, it was noted that children who hesitated to attack an autocratic adult leader diverted their aggressive feelings toward a member of their own gang. If a study could be made, it undoubtedly would be found that

similar conditions prevail in many homes: The child who has been angered by his parents, but who does not dare to strike back at his parents, "takes out" his anger on a brother or sister.[4]

Change in quality of performance. One way in which anger sometimes is expressed by a child is a change in the quality of his performance. One response may be to show restless and aimless forms of behavior. Another response may be to leave the situation: The child walks away, if free to do so. Even when confined, in the flesh, to the annoying situation he may try to absent himself psychologically, as when he finds the arithmetic too difficult and sits through the class period without paying attention to what is going on or goes through the motions of spelling but misses every word. The child may remain bodily in the situation but psychologically withdrawn from the field of operation. An instance of this occurred in a study of frustration by Seashore and Bavelas (1942). One at a time the children were asked to draw a man, but as soon as a child had completed a drawing the experimenter, without taking further notice of it, gave the child another piece of paper and asked him to draw another man, and so on, one drawing after the other. As one trial followed another, many of the children gave less and less time to the drawing. A child who devoted seven or eight minutes to his first drawing or two might, several trials later, dash off a drawing in a few seconds. Again, the drawings of some of the children deteriorated as one trial followed the next.[5]

The change in quality of performance in response to frustration may also take the form of regression—the child backslides and behaves in a more childish or infantile manner.[6]

[4] It should be noted that a child who vents his anger upon his parents is not necessarily a more hostile or poorly reared child than one who does not. The latter child may not only be angry at his parents but also afraid of them. Teachers, parents, and other adults sometimes overlook the fact that when a child never becomes angry in his dealings with them it may be because he is so insecure that he dare not show his real feelings for fear he might get hurt, or for fear the adult himself is too insecure to be able to endure a child's forceful display of feeling.

[5] A scale by Goodenough (1926) makes it possible to rate the drawing of a man in terms of the mental age.

[6] For accounts of loss of constructiveness, regression, and other forms of lowered quality of performance in frustrating situations see Barker, Dembo, and Lewin (1941), Keister (1937), and Updegraff and Keister (1937).

Considerations in Dealing with Anger in Children

In the foregoing we have already touched upon many practical considerations connected with the problem of anger. In its primitive form anger is an aid to self-defense. It serves a necessary and indispensable purpose in the economy of life. It is not only important in that it involves an emotional state in which the child is on the alert to protect himself, but it also, secondarily, can serve as a way of alerting the child's elders. Anger can serve as a corrective in parent-child relationships. For example, the anger parents sooner or later feel if a child seems continually to expect too much and demand too much may lead the parents to examine themselves and their child-rearing policies. The child's anger may give them important clues for gaining a better understanding of him and of themselves.

A child's anger, like an adult's, usually means that there is an annoyance immediately at hand, and this annoyance may call attention to a condition that can, and should be, remedied. In addition, by reason of the fact that anger is not only a surface manifestation but also has roots in the child's experience, the grownup faces not simply an immediate problem but also a larger opportunity and challenge when a child gets angry. In a mood of anger, a child, like an adult, draws aside the curtain behind which he normally conceals himself. The child's anger may provide a significant clue to his motives and to currents in his emotional life which otherwise would go unnoticed.

Anger may be a sign of strength as well as weakness. A child's anger may be genuine, healthy, and, in a sense, noble. It is healthy for a child to become angry or at least to feel anger when someone abuses him, takes advantage of him, or violates his integrity. It is healthy for him to show anger when people whom he loves are under attack, or when someone tries to attack his loyalties, or when someone tries to abuse a weaker person for whom he feels responsible.

But a child's anger, like the anger of an adult, is a sign of something unhealthy when it is not suited to the occasion, when it is not

directed against the real source of difficulty, and when it creates more difficulty for him. We may suspect that the child's anger springs from difficulties in his own internal life when, for example, he is very demanding, quick to take offense, ready to fly off the handle when something happens that no reasonable person could regard as an adequate cause for rage. When a child feels spiteful toward a teacher who criticizes him in a helpful manner we may suspect that the criticism touches off earlier attitudes of hostility which have been aroused in the child's relationships with other people and which now make it difficult for him to accept a bit of criticism. We may similarly suspect inner difficulties when he becomes enraged at others or enraged at himself when he loses in a competitive game or when another gets a higher mark than he. His anger under such circumstances is a sign that he is weak and vulnerable.

When a minor setback acts like a fuse to set off an open show of anger, or provokes rage which is kept under control but betrays itself by little signs, we may suspect that a child is not only struggling with the problems that beset him in his day-to-day life but is also involved in a larger struggle, complicated by attitudes of vindictiveness which have arisen in his earlier experiences. Such a child is in some ways like a dog who has become maddened by boys who tease him and then attacks his master when he comes home.

If an adult can understand a child's anger he has gone a long way toward understanding the child, and the child's anger may also provide the adult with important clues for understanding himself and in helping him toward a better insight into his relationships with the child. The child's anger may provide clues analogous to those used by a detective when he reconstructs a situation from fingerprints, patches of cloth, or the tread of tire tracks left at the scene of a crime.

It should be recognized, however, that the child's anger must usually be viewed also from an immediate practical angle. If the child threatens to start a riot at school or to break the furniture at home, the adult must step in. He would be less than human if he did not become anxious and angry in dealing with this immediate

problem, and he might do something rather foolish on the spur of the moment, as people usually do when they are angry.

But then when the episode is over and feelings have calmed down, it is possible for an adult to look at the child's anger from a larger point of view: What can be learned from it? Why was the child so angry? What touched him off? Why are his feelings so raw and sensitive on the issue that aroused him? What was there about his pride he was striving so anxiously to protect, or what was there that aroused shame, and anger because of the shame? What weakness did the anger-provoking circumstance threaten to expose? What might this flare-up of anger reveal concerning the expectations he places on himself or on others? What long-standing grievance might he be harboring that might account for the fact that so small an affront should touch off such violent feelings?

These are questions that might be raised to illustrate the point that a flare-up of anger may be a quick surface manifestation of deep-seated and continuing attitudes toward self and others. He is exposing at least a symptom of his difficulties to others, and this may aid them in understanding him. So the hostile child who exposes his hostility is at least to that extent more forthright, and probably in a healthier state, than the child who is hostile but carefully bears his anger in silence and carefully conceals his bitterness except when it happens now and then subtly to appear in cynical remarks such as older children sometimes make; or in a quiet gesture of self-contempt; or in the polite but deadly logic by means of which in a "friendly" discussion he lays bare another's mistakes and unmasks another's ignorance; or in such psychosomatic symptoms as skin eruptions or "nervous" headaches.

One factor that makes it difficult to deal wisely with an angry child is that a display of anger is likely to provoke resentment in the person against whom it is directed. If an adult is thus angered too readily (or too long) he not only will be less reasonable in finding a solution for the initial cause of rage, but also his own show of anger will probably increase the child's anger. This circumstance often leads to unnecessarily bitter, mutual animosities. An-

other difficulty is that anger includes a tendency to place the blame on other persons or things. Thus a vicious circle of recrimination may be established.

Jealousy

Jealousy may be expressed in countless ways, ranging from direct attack to subtle and indirect manifestations. Even more complicated are the "inner" or subjective characteristics of jealousy. The term "jealousy" actually covers not one emotional state or type of response but a variety of conditions. The situation in which jealousy is aroused usually is one in which other persons, objects, or conditions possess or share (or threaten to possess or share) affection, honor, or esteem which one desires for oneself. The reaction, in varying ways, may be directed not only against the real or imagined usurper but also against the person or group whose affection one seeks. When a child is jealous it means that he feels threatened and is insecure; he does not have confidence in his own merit and worth, but he acts as though the attention or affection someone gives to another means that he is being denied.

The response may take the form of an obsession which, for a time, takes complete possession of the victim's thoughts, or it may be sporadic, appearing only when the individual is directly confronted by the conditions which produce jealousy.

The feelings and impulses involved in jealousy are also complex. In most instances, jealousy involves emotional experiences akin to anger, an impulse to attack, or a disposition toward vengefulness or toward sulking and surliness. Implicit in jealousy, likewise, are elements similar to those that are found in fear, for jealousy involves a tacit admission of weakness in the face of an issue which the individual regards as crucial to his own desires or welfare. The fear aspects may involve forebodings or acute anxiety concerning the final turn of events, or experiences of self-deprecation, "feelings of inferiority," and kindred conditions.

To probe the feelings involved in jealousy in childhood would at best be a difficult matter. An account of feelings described by

adults in introspective accounts of jealousy has been offered by Gesell (1906). The item most frequently mentioned was anger, and many persons described feelings of hatred and vengeful thoughts; self-pity, as well as dejection, mortification, fear, and anxiety, was also mentioned by many persons. The most frequent combination was anger, self-pity, and grief.

Expressions of jealousy. Many specific examples of the behavior of jealous children have been described in studies of the subject.[7] A four-year-old boy, at first well-disposed toward his baby sister, became aroused when a blanket which had been his was used to cover her; thereafter, he would hit her if the two were left alone together. An extreme case was that of a five-year-old child who had the whooping cough. The doctor told him that if he coughed near his baby sister she might become sick, and "then you won't have a baby sister any more." Thereafter, he was caught several times in the act of coughing into his sister's face.

Sometimes children will express their jealousy through their make-believe and will wreak vengeance by proxy. In a study by Markey (1935), a "housekeeping game" was used to investigate children's make-believe. One three-year-old child promptly took the "baby" doll, placed it on the "stove," and earnestly told the baby that it would have to sit there and burn and burn. It was learned that this child was acutely jealous of a younger sibling.

It sometimes happens that a child who is jealous of a sibling but is subdued in his competition with the sibling in the home will be explosive and rebellious in his relationships outside the home. However, no two children are likely to react in the same way.

A jealous child will sometimes revert to earlier infantile habits. For example, a child who for some time has achieved bladder control at night may revert to bed wetting or may call frequently to his parents at night to come and take him to the toilet. Likewise, he may seek more help and attention than at an earlier time in connection with eating, dressing, and other activities. Also, apparently as a bid for attention, he may exhibit fears which did not appear at an earlier time and which, in effect, represent a plea for sym-

[7] See Foster (1927), Sewall (1930), Smalley (1930), and Neisser (1951).

pathy and attention (although such pleas can easily be misinterpreted). Again, he may become more affectionate than was his wont.

As a child grows older, his expressions of jealousy become quite varied. The jealous child may take to gossip, tattling, and lying. Again, the symptoms may take the form of swaggering, strutting, assuming a conspicuous attitude of nonchalance, and consciously ignoring others. Vindictive plans and fantasies of self-glorification or of misfortunes for others may occur. The child may assume a martyr's role and brood upon the unfairness of his plight. Again, the child may imagine himself in a future conquering-hero role. Neisser (1951) has described many instances of resentment in disguise.

Sometimes parents unwittingly discriminate against one child by showing greater admiration for another child in the family. It is only human for parents to prefer some traits and characteristics to others, and in the process one child may vaguely realize that he does not rank as high in their estimation in this particular regard as does his brother or sister. Where there are children differing in age, sex, interests, and abilities it is impossible for a parent always to treat the youngsters in a way that seems fair to all. One often sees children whose behavior is influenced by actual or imagined discrimination against themselves. Even though the child who plays second fiddle may not express himself aggressively against his sibling, he is likely to find some means of giving vent to his condition. He may become somewhat loud of speech, in an effort to attract attention, or he may become meek and submissive and, by being helpful, silently strive to win good will. He may even go far as to show an uncommon degree of solicitude for his sibling rival. The frantic activities of a child who is thus striving for a place but is barred from direct attack upon his rival often appear, at first glance, to mark the youngster as a loud show-oft or as an usually "good" child, whereas such activities may merely express the child's uneasiness and helplessness.

Related factors. It is likely that all siblings near each other in age will exhibit symptoms of jealousy at some time or other, in one situation or another. When notably jealous children are singled out

as a class for special study and compared with children who are not notably jealous, the findings do not lead to any sweeping generalization that would account for the difference in all cases. It has been found, however, that jealousy is often entangled with other symptoms of emotional difficulty. Among the characteristics observed more frequently among jealous than among nonjealous children in a study by Foster (1927) were selfishness, pugnacity, a special attachment to one parent, and neurotic fears. A higher proportion of jealous children exhibited sleep disturbances, enuresis, habits of nail biting and thumb sucking, hyperactivity, destructiveness, and excessive demands for attention. Where one finds many other difficulties of this kind, the aggressive expressions of jealousy that occur may be simply a feature of a more pervasive problem.

Studies of jealous children indicate that jealousy may occur both among the bright and the dull. In one investigation, there was evidence that the duller of two siblings was more likely to be jealous, especially if he was the older of the two (Smalley, 1930). However, it is not the mere fact of a difference in ability but the parental attitudes associated with the difference that will be most influential.

In one study it was observed that jealousy is likely to be less frequent when the age difference between two siblings is less than eighteen months or more than forty-two months (Sewall, 1930). The behavior and qualities of a sibling who is considerably older or younger may be outside the child's competitive range, so to speak. Jealousy has been found to be associated to a marked degree with evidences of oversolicitude on the part of the mother, inconsistency in discipline, and discord in the marital relations of the parents. The coming of a new baby into the home often marks the beginning of symptoms of jealousy; but in many cases the child who becomes jealous does not show this attitude until the new arrival is above a year or two in age. Many parents often take great pains to "prepare" an older child for the advent of a new baby by informing the child of its coming, trying to enlist the child's interest in planning for the new member of the family, and trying to plant the suggestion, by one means or another, that the newcomer is not to be regarded as a rival. Plans of this kind may forestall jealousy, but the

very steps taken by the parents may betray their own uncertainties and may throw the spotlight on the new baby to such an extent that the older child senses the coming of a rival even before the new baby is born. This is more likely to occur if the child, for any reason, already is ill at ease with his parents.

Competitive relations between siblings sometimes are stimulated by visitors who call attention to the fact, say, that George, although a year younger, is just as tall as his brother, Jim; or who gush over Mildred's curls in the presence of sister Janet, whose hair is straight. It often happens that an older child who used to be noticed by callers is especially neglected and slighted when visitors come to see a newly arrived baby. It would be a good rule if visitors who come bearing gifts at such a time would bring their gifts to the older child rather than to the newborn child (especially since the presents mean nothing to him anyhow).

One complication in the matter of trying to forestall jealousy is the fact that parents themselves cannot anticipate the effect that a new arrival in the family will have upon them. Sometimes the very child who was "unwanted" becomes the apple of his mother's eye. Moreover, parents, who after all are human beings, cannot possibly achieve a thorough and perfectly rational balance in the handling of their children. An effort to "think out" and to weigh the merits of every practice used in the rearing of children might only confuse matters. A genuine affection on the parents' part for each member of the family will, however, cover a multitude of practices, which, if evaluated singly, might be labeled as "bad."

Sometimes parents, in an effort to achieve at least the outward forms of fairness, will adopt the policy of "two of everything" if there are two children in the family. Such a policy may not only do an injustice to the children (each of whom may have abilities or interests which would justify special consideration and privileges) but may also, in a practical way, fail to prevent rivalry between the children (McFarland, 1938). At best, a policy of supplying two tricycles, two sandboxes, two pairs of similar galoshes, and so forth might not even begin to touch upon the real areas of friction and

rivalry. The tricycle or wagon or swing may be the battleground but not the cause of combat.

Jealousy is not, of course, confined to relationships between siblings in the same family, for frequently a child will be jealous of one or both of his parents, as manifested by protests when the parents display affection for each other or share conversations or activities in which the child cannot join. Again, older children frequently suffer from jealousy in their relations with teachers and other adults outside the home and with their associates.

The link between jealousy in early childhood and a jealous disposition in later years has not been traced adequately in scientific studies. Children normally lose their more obvious symptoms of jealousy as they become older and more absorbed in interests outside the family. On the other hand, some children maintain a jealous attitude into mature years, not only toward members of their own family, but sometimes even more toward their associates in daily life.

Among adults, the degree of jealousy a person exhibits frequently bears little relationship to his relative status or power as compared with others. The person who has "arrived" and has achieved the outward semblance of success will sometimes begrudge the recognition bestowed upon an underling, much as a big hound bristles when his master pets a forlorn poodle. A person who was intensely jealous of a brother two years older than he may, as it seems to him, completely outgrow this jealousy as he and his brother move into adulthood and see less of each other and seldom get in each other's way. It is quite possible, however, that traces of those earlier bitter experiences remain, even though jealousy is no longer shown toward the brother. Traces may remain if, for example, the brother who was jealous developed this attitude because of a lack of trust in himself and others. Such an attitude might persist in adult years unless something has happened to give him a more confident and charitable view of himself and others. He may not be jealous of his brother, he may not so clearly be aware of feelings of jealousy, but again and again he may feel vaguely hurt when another gets recognition or wins good fortune. His feelings may not take the

form of being against those who are fortunate but appear in the form of blaming himself. His feelings may also express themselves in the way he takes sides against some people in his environment who represent, psychologically, objects of jealousy similar to what his brother represented when he was younger.[8]

Jealous attitudes in children will be influenced by competitive attitudes in parents. A parent's own zeal to surpass, to excel, and to prove himself as an able, successful person is likely to permeate his relationships with his child. The competitive attitude may appear in small details: The parent may feel triumphant if his baby walks a month or two before the average or says his first word while neighboring children of the same age are still babbling. Later such competitive attitudes may appear in efforts to get the child to learn to read precociously or to excel in other ways. If now a child fails to meet the parent's desire to outdo others, the parent is tempted to become angry, to complain, to make unfavorable comparisons between one child and another. This in turn may lead the child who is rebuffed to feel that he is being discriminated against and even more to feel that he does not measure up to what he should be. Such competitive pressures as these in the lives of the parents probably contribute more to the development of jealous attitudes in children than the more spontaneous expressions of affection, enthusiasm, admiration, or sympathy which a parent now displays toward one child, now toward another.

[8] Hilgard (1951), in a study referred to in the discussion of rivalry in Chapter Seven, has offered an interesting account of the way in which the rivalries a mother experienced as a child might, if not resolved, be re-enacted in her relations with her children.

CHAPTER TWELVE

Language Development

This chapter will deal mainly with structural aspects of language development, since the functions of language in a child's life and the interplay of language on other aspects of development are considered throughout the book.[1]

The development of language shows many principles that are characteristic of other aspects of development. It demonstrates the roles of both learning and growth. It involves the emergence of new responses as well as a differentiation and refinement of older forms. It involves both a process of adding on and a process of casting away. It demonstrates the principle that with the development of a capacity there is associated an impulse to use it. In addition, a study of language formation emphasizes the fact that what happens in any aspect of a child's development has a profound influence on, and is profoundly influenced by, other developments in the organism as a whole. Language is a unique accomplishment of human beings and represents perhaps the highest form of behavioral development, yet it is intimately interlinked with bodily functions necessary for survival. The organs of speech are also the organs involved in breathing and eating and food getting.[2] McCarthy calls attention to findings which indicate that an infant makes practically no utterances, except those involved in crying,

[1] When we call a child an "infant" we testify to the importance of language since "infancy" is from the negative *in* and *fans*, the present participle form of *fari* (*to speak*).

[2] The relation of infant vocalizations to functions of the organism has been discussed by McCarthy (1952). For an excellent review of research in language development see McCarthy (1946; 1954). See also Dennis (1949).

until breathing and feeding are well established.[3] Stein (1951) points out that sounds made by babies are made by a repetition of elements of the act of sucking.

McCarthy also notes parallels between language development and motor development: The child begins to babble at about the time when he becomes able to sit alone; he speaks his first word at about the time when he can stand alone. A child's sound production is also tied to the development of his teeth.

This principle as it relates to language has been emphasized in earlier chapters where we have noted, for example, evidence that a child's progress in early stages of speech formation is influenced by emotional factors, notably by the affection and attention he receives from adults. It is emphasized also in observations which show that harsh methods of discipline as applied to the child's motor development may produce tensions which interfere with speech.

Early Vocalizations

The healthy child begins life as quite a vocal creature. During the first two or three weeks of life his vocalizations include cries of varying pitch, quality, and loudness. He produces also a number of other sounds, such as grunts, yawns, sighs, an "inspirational crow," and of course, sounds connected with coughing, sneezing, and belching.

At the newborn stage and during early days of life a large percentage of the sounds uttered by the infant are the aspirate *h* sound (Irwin 1947a, 1947b). McCarthy (1952) sees these sounds as possibly linked to the young child's gasping for breath.

During the first days of life it is questionable whether the child's crying and other vocalizations are differentiated into sounds characteristic, say, of hunger, pain, anger, or fright. However, according to one study, such differentiation is achieved by the age of one month, so that a child will give different cries for hunger, pain, and discomfort (Gesell, 1928). One feature of early development is increased differentiation.

[3] See also Irwin and Chen (1946), and Shohara (1942).

The child's earliest vocalizations do not include many sounds which later will appear. In other words, another feature of development is the emergence of new sounds, the enlargement of the repertory of vowels and consonant sounds that the child can produce.

Vowel sounds predominate in the child's earliest vocalizations (Irwin, 1941; Lewis, 1936; and Shirley, 1933a). During the first days of life certain consonant sounds appear while others occur seldom, if at all, until later in the child's development.[4]

The changes that occur in vocalization do not consist solely, however, of additions to the repertory of sounds. A baby produces many sounds that are not elements of the particular language he will learn, and many such sounds may, accordingly, drop out as he grows older. Thus, a child destined to speak English may produce sounds corresponding to the German *ü* or the Danish *ö* or the French guttural *r*. Many of the sounds he produces may not correspond precisely to any known alphabet or system of phonetic recording. From ordinary observation it appears that a person finds it difficult when he is older to reproduce some of these same sounds.[5]

Early forms of communication. A child's utterances serve as a means of social communication long before he has acquired the ability to articulate precise words or phrases. The babies in Shirley's study (1933a) babbled to examiners at a median age of twenty-five weeks, and many of the mothers reported babbling as a social reaction at a considerably earlier age (the median child was credited with his "first word" in the examiner's presence at sixty weeks). Inflections and intonations resembling those found in adult speech were also noted in advance of the "first word." Among these early inflections, intonations, and expressive utterances were "squeals of delight, strong grunts of pain or disgust, grunts with the rising inflection of a question, guttural barking growls that reminded the

[4] For a review of other findings with respect to early vocalizations, see Irwin and Curry (1941).

[5] It appears that a child who is later going to learn one or more foreign languages would profit if sound elements from these languages could be incorporated into his speech from an early age.

examiner of a dog worrying a bone, shouting and calling to attract attention, and calling in scolding or warning tones. . . ."

The child usually understands many words spoken to him before he himself can use the words. In his early response to the language of others he reacts to inflections and intonations before he seems to be concerned about precise pronunciation. If he has learned to wave in response to "bye-bye," he may similarly respond to "my-my" or even "pooh-pooh," if these words are spoken in the same tone of voice. One important development is the ability to detect emotional meanings which an adult expresses by means of his voice. According to Bühler (1930), the average child reacts to a change in the tone of the adult's voice at two months (as when an adult, hidden behind the child, first speaks in a normal tone and "then suddenly begins to growl" or begins to emit falsetto tones), and distinguishes between angry and friendly talking at six months.

Gesture language, often accompanied by unintelligible vocalizations and taking such forms as pointing, reaching, and movements indicating efforts to reject, avert, or accept, also frequently serves as a means of communication long before the child can express himself in so many words.

The "first word." Much language development has taken place before the baby speaks his "first word." It is difficult to spot the first word. A child may have used a certain sound to convey a definite meaning even though that sound may not be found in any known dictionary. For example, one child used the expression "oi-yoi" to ask for water and for no other purpose. The expression functioned as a word even though it might take a visiting observer some time to recognize it as such. On the other hand, a child might use an utterance that sounds like a word but it may not be clear that this sound functions as a word or is used by the child in a meaningful way. By reason of ambiguities of this sort, one mother may credit her child with a "first word" where another would not. As is only to be expected, mothers are likely to detect discriminating use of one or more words earlier than will an examiner who sees the child only on occasion.

In view of differences in interpretation as to what constitutes a

first word, and in view of large differences among individual children, any statement as to age at which the normal child uses his first word or words must be taken with a good deal of caution. In the study by Shirley, cited above (in which the children represented a selection somewhat above the average of children in the general population), the median age at which the first comprehensible word was spoken in the examiner's presence was sixty weeks, while most of the mothers reported that the babies had a vocabulary of two or three words at fifty-two weeks. Twenty-five per cent of the children spoke their first comprehensible words in the presence of the examiner by the age of forty-seven weeks, and 25 per cent had not yet reached this accomplishment by the age of sixty-six weeks. The age at which the first word appears varies from eight months or less to well over two years.

Content of child's early vocabulary. Nouns are likely to be most numerous among children's "first words," but there is also a sprinkling of verbs, adverbs, and adjectives. Pronouns usually appear later.

For a long time after he begins to use a few words the child continues to babble and to use a good deal of incomprehensible speech, and during the months immediately following the appearance of articulate words, additional new words may be rather slow in coming.

In a study of size of vocabularies at different ages, Smith (1941) found an average vocabulary of three words at twelve months, nineteen words at fifteen months, and twenty-two words at eighteen months. The fact that children do not necessarily make large strides in their vocabularies as soon as they begin to "talk" is of practical interest, because some parents, fascinated by the advent of language, seem to become impatient to hear more.

At two years the average number of words spoken by children in the study above was 272, again a substantial increase in terms of actual numbers. The averages at later levels follow: 896 words at three years; 1,540 words at four; 2,072 at five; and 2,562 at six (based on only nine subjects). Such vocabulary counts as these cannot be used as dependable norms.

Decline in incomprehensible speech. As the child adds more and more words to his repertoire, there is a decline also in his use of unrecognizable or incomprehensible utterances. In a study by McCarthy (1930), it was found that only 26 per cent of the utterances made by children in response to the investigator were comprehensible at the age of eighteen months, while nearly all that the child said (99.8 per cent) was comprehensible to the investigator at fifty-four months. An indication of the child's progress in more or less precise pronunciation is given in a study by Wellman and her associates (1931), in which it was found that children at the age of three years (with an average IQ of 115.9) correctly pronounced 82.5 per cent of the diphthongs, 75.2 per cent of the vowels, 68.4 per cent of the consonant elements, and 51.8 per cent of consonant blends covered in the investigation. The ability to pronounce words so clearly that a person who is unfamiliar to the child can understand them may lag considerably behind the development of a rather large vocabulary. Frequently a child will continue for a time to use a large number of words that can be understood by an older brother or sister, or by the child's mother, while remaining incomprehensible to outsiders and even to his father.

Spontaneous revision of language habits. The development of language usage provides almost countless illustrations of the principle of developmental revision of habits, as set forth in an earlier chapter. In his own good time, if provided with a correct model, the child corrects his earlier mispronunciations even though no adult is hounding him. Most of the children who for a time say "free," because that is the best they can do, eventually say "three," and so in countless other examples that might be given.

However, in spite of a great amount of self-correction, many children show faulty articulation of some speech sounds in the elementary grades. When such faults are not due to an organic condition (such as defective hearing), they represent habits that perhaps might have been avoided.

Misunderstanding due to faulty articulation. While a child's articulation is still childish, there must be many times when his elders strike him as hopelessly stupid people Often he repeats

himself over and over, and yet they do not understand. An example of slow comprehension by a parent follows:

A father noticed that there was a dog in the nursery school attended by his three-year-old daughter, and on their way home the following conversation occurred:

Father: What is the name of the dog at your school?
Child: Way.
Father: Way?
Child: No, Way.
Father: Did you say Way?
Child: No. (Angrily) You stupid, I said WAY!
Father: Oh, you mean Ray?
Child: Yes, that's what I said.

In a similar vein:

Mother (to two- and three-year-old Peggy and Marian): Oh, look, there's a monkey wearing a red coat!
Peggy: Oh, yook!
Marian: Don't say yook, say wook.

Development of phrases and sentences. When a child first begins to "talk," single words are likely to predominate (although a string of sounds with varying inflection and resembling sentences may be noted before that time). The single words frequently function as sentences. As McCarthy has pointed out (1933), the single word "mama," with varying inflections and gestures, may mean "mama give me," or "mamma look," or "there is mama."

Even the single words thus used are likely to be short ones. Up to the age of two years, one-syllable words constituted about 70 per cent of all the comprehensible words spoken by all the babies in the study by Shirley cited earlier. For several years many youngsters continue to shorten words by dropping a syllable or two so that "inspect" is "'spect," "conductor" is "'ductor," and a neighboring "Missus" with four children may continue to be a maiden "Miss." Some of the children in Shirley's study began to use phrases and sentences shortly before the age of eighteen months, but such combinations of words were relatively infrequent before the age of two years. When sentence formation did appear it was noted that children

frequently repeated a sentence over and over. One child, for example, at sixty-six weeks, repeated "Wha's dat?" seventeen times during an examination and used only two other sentences.

The increase with age in number of words per remark has been measured with considerable care in several studies. The averages in different studies agree quite closely when based upon a substantially normal or representative selection of children. The average length per remark is considerably higher, however, in the case of bright children. In one of the studies (McCarthy, 1930), in which an analysis was made of fifty consecutive remarks made by each of twenty children at each half-yearly age level from eighteen to fifty-four months (the children were selected from various socio-economic groups; the average IQ's at the various half-yearly age levels ranged from 103 to 112), it was found that the average number of words per remark increased from 1.2 at eighteen months to 4.6 at fifty-four months. In another study of brighter children, observed mainly on the nursery-school playground and primarily when conversing with one another, the corresponding averages at eighteen months and fifty-four months were 3.7 and 9.5.

Quite as significant as the increase in the length of sentences is the change that comes with age in other characteristics of the sentence. Among other things, there is an increase in the use of sentences that are structurally complete with nouns, verbs, and other parts of speech. There is also an increase in the use of complex and compound sentences, although, throughout the preschool period, simple sentences by far predominate over sentences containing dependent or coordinate clauses. Of the sentences used by the older preschool children in a study by Fisher (1934), and representing children above average in intelligence, only 5 per cent were complex and only 2 per cent were compound. Coincident with the development of complete sentences is an increase also in the number of verbs as compared with nouns and in the number of conjunctions and prepositions. During this period of development, the increase in the child's language repertory is, of course, associated with development of his mental abilities in general. Among other things, there is an increased use of inflections and verbs, and an increase in the

use of the past tense (which is infrequent at the age of two years) and in the use of the future tense.

Increases in loquacity. One notable feature of the child's progress in language is the tremendous amount of exercise he undertakes on his own accord, as noted earlier. The gains that children show in volume of talking may be considerably greater than the gains they show in their vocabularies. Results obtained in a study by the writer and an associate, in which tallies were made of the total number of words uttered by children during a forenoon in the nursery school (from the time they arrived in the morning until after lunch, a period of a little more than three hours), are summarized in Table XIX. The total-number-of-words-spoken tally allowed a count of

TABLE XIX

NUMBER OF WORDS SPOKEN AND NUMBER OF DIFFERENT WORDS USED PER THREE HOURS (APPROXIMATELY) BY NURSERY-SCHOOL CHILDREN[6]

Age in Months	*Number of Children*	*Total Number of Words Spoken*		*Total Number of Different Words Used*	
		Range	*Mean*	*Range*	*Mean*
24–29	11	236– 729	402	60–142	94
30–35	20	99–1,967	763	32–298	153
36–41	22	396–1,990	1,296	111–394	254
42–47	26	332–3,084	1,772	117–552	309

one for each word or each repetition of a word (for example, a count of ten for the word "swing" if the child used this word ten times during the forenoon). The total-number-of-different-words-used tally, on the other hand, allowed a count of only one for each separate word, whether the word was used once or many times (for example, only one tally for "swing" in the above illustration). The figures would, of course, be much larger if the children were observed throughout the day.

[6] Adapted from A. T. Jersild and R. Ritzman, "Aspects of Language Development: The Growth of Loquacity and Vocabulary," *Child Development* (1938), 9, 3:243-259. Reproduced by permission.

Later Language Development

Beyond the nursery-school level, the child's language activities become increasingly complex and they assume increasing importance in connection with the child's schooling. In his reading, and to a lesser extent in his writing, he eventually utilizes an enormous number of words which he seldom or never uses in speech, and his language activities become saddled with the need for many associated learnings—such as spelling, grammar, punctuation, sentence formation, and paragraphing.

Increase in vocabulary. One of the more obvious changes as a child grows older is a gain in vocabulary. As noted at an earlier point, Smith's findings, based on a limited number of six-year-old children (1941), showed a vocabulary of about 2,600 words. Estimates of the size of vocabularies of typical children of elementary-school, high-school, and college age vary tremendously.[7]

Changes in understanding of the connotation of words. A child's mastery of language develops not only by adding "new" words but also, to a significant degree, through the increased understanding of the connotations of "old" words.[8] In theory, it should be possible for teachers and textbook writers to introduce new words gradually, so that a child may continually incorporate new terms into a familiar context. But this policy is difficult to work out in practice, especially with older children. In the reading matter of the average child and in the conversations and discussions in which he participates, a large number of the words he meets will be unfamiliar to him, and the meanings of many others are likely to be vague. The child himself may use many terms that have relatively little meaning to him, as compared with the meaning intended by the writer or the teacher. Many words have many meanings (for example, the word *run*), and these meanings may vary considerably in difficulty.[9] Thevaos points out that a person's vocabulary as measured by the

[7] See, e.g., Seashore and Echerson (1940); Hartmann (1941); and Rinsland (1946).

[8] A study of children's understanding of the multiple meanings of words has been made by Thevaos (1951).

[9] See, e.g., Lorge and Thorndike (1938), and Foster (1943).

number of words for which at least one meaning is known is likely to differ from the size of vocabulary as measured by knowledge of all or several meanings of each word in the test.

In much of what is presented to the child, the problem is not so much one of complete mastery as opposed to complete ignorance as it is one of varying degrees of understanding. As soon as the child's status in school gets him into the study of such matters as history and geography, for example, it becomes a difficult, if not impossible, task to map out a list of terms that can be mastered and "laid by," much as a child might lay by one row after another as he hoes the potato patch. Many of the terms he meets can be understood only by means of other terms that may be just as unfamiliar.

Examples of vague meanings. In a study by Scott and Myers (1923), children in the fifth through the eighth grades were tested on a list of terms taken from history and geography. It was found that the meanings of many terms which they met frequently in their reading and classwork were quite vague to them. Less than 40 per cent of the children below the eighth grade were able to give "reasonably correct" definitions of such terms as "colonists," "taxation," "minister" (ambassador), and "constitution." In a seventh-grade class, some of the children were under the impression that, since Benjamin Franklin was a foreign *minister*, he must have been a clergyman. The subject of children's understanding of various concepts is further treated in Chapters Thirteen and Fourteen.

Illustrations of varying levels or degrees of understanding appeared in an unpublished study by the writer in which children were asked, among other things, to tell what is meant by a *strike*. To some children, the term had no other meanings than those connected with the verb *to hit*. Most of the subjects who were questioned in the fourth through the sixth grades had other associations with the term. At one extreme were children who could offer little more than such answers as the following: "It's when people break windows and throw stones at the police"; or "It's when people walk outside a shop with signs on their backs with words like 'unfair' on them." Such answers as these, it can be observed, phrased in terms of visual

images drawn from pictures or actual observation, indicate that the child has a notion that a strike involves conflict of some sort. Still more comprehension of the term was revealed in an answer, such as "It's when the workers and the bosses have an argument and the workers stop working," which indicates that the child knows there is a dispute between employers and employees, even though he may not be able to define things further. At a higher level of understanding, the child may not only mention the fact of a dispute and describe the parties to the dispute but he may also describe the issues involved, such as demands for more pay or shorter hours. At a still higher level of comprehension were a few children who not only described what happened in a strike and the issues that might be involved but also went so far as to elaborate upon steps that might be taken to terminate a strike and the possible effects on the employer's business or on the workers' buying power if the strikers won.

Mental and Social Orientation of the Young Child as Revealed by His Language

Once a child has begun to talk, his language development becomes increasingly interesting as a means of studying his mental processes, his interests, and his orientation to the material and social world in which he lives.

"I" and "you." The child's use of pronouns shows interesting trends. When pronouns appear, various forms of "I" predominate. In a study by Smith (1931) of children aged two to five years, "I" had a frequency of 2,543, as compared with a score of 955 for "you." "I" is especially frequent as compared with other pronouns at the earlier age levels, and it continues to show a high frequency of use throughout the preschool period (and from that point onward, too); but as children advance in age during preschool years, there also is an increase in other forms, such as "We," "you," "she," and "it." Table XX summarizes the number of times these pronouns were used at half-yearly age levels in the spontaneous speech of two- and three-year-old children (above average in IQ), as

recorded during observation of the children on the nursery-school playground.

TABLE XX

FREQUENCY OF VARIOUS PRONOUNS IN CHILDREN'S CONVERSATIONS [10]

Age in Months	24–29	30–35	36–41	42–47
Number of Children	11	11	11	11
Total Number of Words Spoken During Period of Recording	13,124	22,016	46,624	64,352
Pronouns Used:				
I (*my, me, etc.*)	1,442	2,991	5,692	5,753
you (*your, -self*)	94	468	1,770	2,372
we (*our, us, etc.*)	28	177	406	881
he, she (*him, her, etc.*)	33	187	437	698
it (*it's, -self, etc.*)	155	567	1,206	1,485
they (*their, them, etc.*)	24	58	139	266

The relatively high frequency of the first-person pronoun in the speech of young children is of some interest, although it is difficult to see how one could expect anything else. A child's own impulses and desires, activities, pleasures, and pains are more vivid and closer to him than is his comprehension of the personalities and concerns of other people. That the child's private and personal concerns stand uppermost in his first reactions to the world about him, insofar as these are revealed by his language, appears not only through his frequent use of "I" but also through the content and tone of his remarks, questions, and demands. However, from the time he begins to talk, the very fact that he expresses himself at all bespeaks a certain degree of sociability and adaptation to other persons. This point has been emphasized in a study by Fisher (1934) of the content of children's spontaneous speech on the playground. When comprehensible remarks were analyzed according to three categories —*self* as subject: "I want to be first"; *other person* as subject: "Mary is coming along"; and *thing* as subject: "The carriage goes there" —it was found that slightly over one-third of the remarks were of the first-named type. However, while a child's remarks are heavily

[10] Adapted from A. T. Jersild and R. Ritzman, "Aspects of Language Development: The Growth of Loquacity and Vocabulary," *Child Development* (1938), 9:243-250. Reproduced by permission.

studded with "I's," there also is a vein of sociability running through them, for they at least are usually addressed to another person.

This tendency to refer to oneself is not, of course, confined to children, because adults, in their conversation, are likewise likely to deliver a large proportion of remarks about themselves.

Egocentric and socialized speech. The fact that a large number of the remarks of a young child deal with himself, his activities, interests, and personal concerns raises the question as to the extent to which he is capable of conversation of the adult type. To what degree is his talk so one-sided as to amount to little more than a monologue, as contrasted with an effort really to communicate with others and to exchange ideas on a give-and-take basis?

One investigator (Piaget, 1932), working with French-speaking children in Europe, distinguishes (among other things) between "egocentric" and "socialized" speech. "Egocentric" speech involves no endeavor to interchange ideas, to consider the other person's point of view; it represents, rather, a form of "collective monologue" or "pseudo-conversation." In "socialized" speech, on the other hand, the talker really addresses the listener, considers the other person's viewpoint, and tries to communicate ideas and to share meanings. According to Piaget, up to a certain age children think and act more egocentrically and share one another's intellectual life much less than do adults; and there is little in the nature of a meeting of minds or real social life (of an intellectual sort) below the age of seven or eight years. Not until this age, he says, are children really able to enter into genuine arguments in which each is aware of the other's point of view and joins issue with it.

This egocentricity, according to Piaget, springs from intellectual limitations which appear also in the child's own private thoughts, for the young child is not conscious of his own thought processes and does not enter into genuine arguments with himself (in the sense that he weighs and checks his own private reasoning and conclusions).

Several studies of young children made by other investigators, however, do not confirm these theories of Piaget's. In these studies the percentage of egocentric remarks has been found to be decidedly

ower than the proportion claimed by Piaget (see McCarthy, 1946), nd many observers have noted "socialized" language in children s young as three or four. However, even though the weight of vailable evidence goes counter to Piaget's conclusions as to the xtent of egocentrism in the language of young children and his onclusions as to the young child's lack of ability to share his houghts and to enter into a genuine conversation, it remains true, s everyone can recognize, and as will be noted more particularly n the next chapter, that the less mature a child is the more limited vill be the extent to which he can understand or join in another's oint of view.

Factors in the Development and Acquisition of Language

Learning and growth. That changes associated with maturation, s distinguished from practice, play an important role in early anguage development is indicated by the findings in a study by Strayer (1930) that have been referred to in an earlier chapter.

There remains, of course, not only the fact that learning is essen- ial to language development but also the fact that conditions or pportunities for learning influence the amount and kind of learning hat takes place.

Language as related to socioeconomic status, and age of associ- ates. In studies at the preschool level it has been found that there s a relationship between children's language and the socioeconomic status of their homes (McCarthy, 1930). Children of higher socio- economic status surpass those of lower status in such matters as ength of sentences used, frequency of questions, proportion of remarks involving adapted information, and vocabulary. This differ- ence is no doubt associated with the fact that children of higher socioeconomic status also tend to be brighter than children of lower status, but it is likely that children living in homes of higher socioeconomic status would have some advantage even if the factor of intelligence were equalized.

The advantage of children in families of higher socioeconomic and educational status may in part be due to the fact that their parents

are able to spend more time with them. There is evidence tha children who associate primarily with adults are more precociou in their language development than are children who associat mainly with children.

Language of twins and "singletons." It has also been found tha twins tend to progress less rapidly in their language developmen during the age from two to five years than do "singletons." In on study of twenty pairs of twins at each yearly age level from tw to five years it was found that the twins began to talk one montl later, on the average, than their older brothers and sisters (Day 1932a, 1932b). In another study that included children up to th age of nine and a half years (Davis, 1937), it likewise was found tha twins lagged behind "singletons"; by the age of nine and a half, twin from upper occupational groups had practically overcome thei handicap, but twins from the lower occupational groups were stil inferior in language.

Apart from any hereditary or congenital factors that might exer an influence, the phenomenon is no doubt due in part to environ mental factors. Among other things, the type of companionship which twins provide each other may mean that there is less reason for using language to communicate with others. In some cases twins can communicate with each other by means of fewer words than would be required to communicate the same meanings to someone else. Facial expressions, gestures, and other subtle signs, as well as grunts, single words, cryptic murmurings, and the like, which each has learned to understand through close companionship with the other, may take the place of the conventional flow of words and sentences.

It has also been found that only children tend to surpass "single tons" who have brothers and sisters (Davis, 1937).

Sex differences. In several investigations girls have been found to surpass boys in many aspects of early language development, such as in amount of talking, number of different words used, and use of sentences. Findings to the effect that girls are superior during early childhood and preschool years have been quite common, but the amount of the difference has varied in different studies, and

exceptions to a tendency toward superiority of girls have been found in studies of Negro children (Anastasi and d'Angelo, 1952). At the elementary-school level there usually are far more boys than girls with reading difficulties, but factors in addition to language development as such are involved in this. McCarthy (1953) has discussed the ways in which a girl may have an advantage in language development in that she has more access to common interests with the mother than a boy has.

Language and intelligence. A positive relationship is usually found between language ability, as measured by various means, and mental ability, as measured by standard intelligence tests. Since the understanding and use of words play so large a role in many intelligence tests it is difficult to determine just what this relationship means. Does the child earn a good score on a verbal intelligence test because he has a good command of language or does he have a good command of language because he has good intelligence? No definite answer can be given to this question.[11]

The relationship is not so high that early language development can be used to predict later intelligence, except within broad limits. If a child is quite precocious in his language development, this may be taken as a pretty good sign that he is at least normal in intelligence and probably somewhat superior. On the other hand, if he does not begin to talk until beyond the average age, this does not preclude the possibility that he may turn out to be bright. A delay of many months, as compared with the average, is not at all a certain indication that he is likely to turn out to be somewhat dull.

Bilingualism. Throughout our own country and in the world at large many children are called upon to adjust to two different languages. The problem of bilingualism is interesting not only from the point of view of children who live in homes that use a foreign or unofficial language, but also to a lesser extent, from the point of view of the educational problem as to when instruction in foreign languages might best be introduced into the curriculum.

[11] See, e.g., Shirley (1933a); and Gewirtz (1948). Spiker and Irwin (1949) found that there was a small but statistically reliable relationship between aspects of infant speech and scores on a test of mental development, but the size of the relationship does not provide a basis for predicting one variable from the other.

A systematic inquiry into the subject would require, of course, attention to many factors. For one thing, the ways in which a child is called upon to adjust to two different languages may vary decidedly. In one situation, he meets one language almost exclusively until he reaches school age and then is called upon to acquire a new language. In another situation, he may be confronted with two languages from the start. Here again there are many variations. The two languages may be on an almost equal basis, or one may predominate over the other in varying degrees, or one child may be called upon to use both languages, while another, under other circumstances, may be reared to speak in only one language but to understand when spoken to in another language. His progress in each language, as well as his adjustment to the bilingual environment, may also be complicated by ridicule, prejudices, feelings of inferiority, and other tensions in the social and emotional sphere. These matters have received relatively little systematic attention.

Theoretically, if a child is called upon to acquire two different languages, he should make slower progress in each than he would make if he were learning only one. That children might be handicapped in this way has been suggested by findings based upon studies of a limited number of children (Smith, 1931). From observations of a family of eight children (Smith, 1935) who made frequent moves between China and America and who were exposed to the two languages for varying periods and from different sources, Smith concludes that a bilingual environment is not likely to delay the first use of words; if a handicap occurs, it is likely to appear later.

In a later study of thirty bilingual children (English and Chinese languages) Smith (1949) found that in either of the two languages the bilingual group had below-average vocabularies as compared with monolingual children. When vocabularies in the two languages were added together the combined vocabularies of the average bilingual child did not surpass the average vocabulary of children who knew only one language.

The necessity of adjusting to two languages does not at all mean that the child's mental processes will be thrown out of gear, although

some children may be at a disadvantage. That a child's mental growth and ability to cope with the work at school are not necessarily seriously affected is indicated in a study by Arsenian (1937) in which comparisons were made between a group of monoglot children and a group of bilingual children, matched person for person on the basis of race, sex, socioeconomic status, and age in months. Among the subjects in this study were over a thousand American-born children of Italian parentage, over a thousand American-born Jewish children, and smaller samplings of foreign-born Italians, foreign-born Jews, and children of mixed parentage. The children ranged in age from nine to fourteen years. No reliable differences were found between the two groups in average intelligence or in age-grade status. In a study of matched children at the preschool level Darcy (1946) found that bilingual children did relatively much better on a "performance" test of intelligence (Adkins Object-Fitting Test) than on a test which involves greater use of language (the Stanford-Binet).

However, the effect of the bilingualism on a child's test performance is likely to be influenced by the extent to which there are emotional complications connected with his bilingualism. Anastasi and Cordova (1953) found, for example, that Puerto Rican children who had suddenly been required to cope with an all-English school situation "insulated" themselves by becoming rather passive and apathetic in their attitudes, and this apparently also contributed, in part, to a lower than average performance on mental tests.

Somewhat more difficult to probe are the effects bilingualism may have on a child's social and emotional adjustments. A child from a foreign-language background is likely, in some situations, to be teased and perhaps cut off from the group. Even when no such unpleasantnesses arise, the child himself may be self-conscious with regard to his background and language, and may be timid (or sometimes overassertive) when called upon to express himself, especially if he is in the process of transition from one tongue to another, still uses accents and speech forms from the foreign language, or still "thinks" in a foreign language. In a study by Spoerl (1944) at

the college level it was found that students from bilingual backgrounds showed poorer emotional adjustment than did control subjects.

Such effects as ostracism, teasing, and feelings of inferiority by reason of bilinguality are, undoubtedly, less likely to arise if the child is a member of a rather large community in which the majority of the children are of the same national origins and have much the same home background, as far as language is concerned, than if the child is a member of a small minority or stands alone.

In visits to schools where there were newly arrived children with a foreign-language background the writer has observed that fellow pupils, at least within the classroom, sometimes take their cue from the attitude shown toward such youngsters by the teacher. It is likely to relieve the situation somewhat for such children if the teacher not only accepts them in a friendly way but also, without making them too conspicuous, gives them a chance to take pride in the fact that they know another language and are acquainted with conditions in a foreign country. Such a child's morale may get a boost if the teacher can talk to him a bit in his own language. The same seems to hold true with regard to native-born and natively reared children who happen to come to school from a section in which their immigrant parents and all their neighbors still speak a foreign language, a situation much less common now than a generation ago.

CHAPTER THIRTEEN

The Growth of Understanding (I)

It would be fascinating if we could know the nature of an infant's experience as he first becomes aware of his own existence and receives impressions of happenings in the world about him. Unfortunately, as adults we cannot see either the inner world or the outer world from an infant's point of view. What we see is heavily influenced by ways of perceiving and thinking that have developed through the years of our own experience.

In the third chapter of this book it was noted that a newborn child responds in a variety of ways to sensory stimuli, but we can only guess what might be the nature of his thoughts and feelings. When, however, we note that his observable behavior is diffuse and lacking in coordination, as compared with an older person, it seems reasonable to assume that his mental experiences, whatever they may be, are not as clearly defined or as well differentiated as an older person's. We can also assume that the special meanings that come to be associated, as time passes, with the happenings of everyday life are also lacking in the child's first experiences.[1]

Signs of Increasing Awareness and Alertness

Table XXI, which is drawn from a study by Bayley (1933b) of the mental growth of young children, shows some landmarks in the development of the young child's ability to discriminate and to

[1] The subject of mental development is treated also in the two chapters which follow and in chapters dealing with language development, morals and religion, and intelligence, as well as in sections of chapters dealing with the child's search for selfhood.

TABLE XXI

MENTAL DEVELOPMENT TEST ITEMS DURING THE FIRST THREE YEARS [2]

Name of Test	Age-Placement Value (months)	Name of Test	Age-Placement Value (months)
1. Postural adjustment when lifted	.5	35. Reaches for cube	4.5
2. Lateral head movements, prone	.6	36. Eye cooperation in reaching	4.8
3 Momentary regard of ring	.6	37. Partial thumb opposition	5.1
4. Responds to sound	.6	38. Picks up cube	5.2
5. Prolonged regard of ring	1.2	39. Retains two cubes	5.3
6. Horizontal eye coordination	1.2	40. Regards pellet	5.35
7. Responds to voice	1.3	41. Recovers rattle	5.35
8. Arm and leg thrusts in play	1.3	42. Discriminates strangers	5.55
9. Vertical eye coordination	1.4	43. Vocalizes eagerness	5.6
10. Circular eye coordination	1.45	44. Simultaneous flexion and thumb opposition	5.75
11. Social smile	1.45	45. Lifts cup	5.8
12. Vocalizations	1.55	46. Paper play	5.8
13. Turns eyes to light	1.9	47. Accepts second cube	5.85
14. Free inspection	2.2	48. Vocalizes pleasure	5.9
15. Eyes follow pencil	2.3	49. Vocalizes displeasure	5.95
16. Anticipatory excitement	2.4	50. Reaches persistently	6.05
17. Manipulates ring	2.9	51. Turns after spoon	6.1
18. Reaches for ring	3.0	52. Mirror-image approach	6.1
19. Blinks at shadow	3.1	53. Picks cube deftly	6.2
20. Vocalizes to social stimulus	3.1	54. Several syllables	6.3
21. Fingers hand in play	3.2	55. Bangs in play	6.35
22. Reacts to paper on face	3.2	56. Sustained inspection of ring	6.4
23. Carries ring to mouth	3.3	57. Unilateral reaching	6.45
24. Aware of strange situation	3.3	58. Vocalizes satisfaction	6.5
25. Follows vanishing object	3.35	59. Lifts cup by handle	6.6
26. Anticipatory adjustment to lifting	3.4	60. Exploitive string play	6.7
27. Regards cube	3.45	61. Rotates wrist	6.7
28. Play with rattle	3.5	62. Scoops pellet	6.8
29. Manipulates table edge	3.6	63. Smiles at image	7.2
30. Inspects hand	3.65	64. Interest in bell details	7.2
31. Closes on dangling ring	3.95	65. Looks for spoon	7.25
32. Turns to sound	4.0	66. Frolic play	7.3
33. Beginning thumb opposition	4.1	67. Pulls string: secures ring	7.35
34. Active table manipulation	4.4	68. Vocal recognition	7.4
		69. Sound production, interest	7.6
		70. Complete thumb opposition	7.65

[2] Adapted from N. Bayley, "Mental Growth During the First Three Years," *Genetic Psychology Monographs* (1933), XIV, No. 1, pp. 26-30. Reproduced by permission. In addition to age-placement values, in months, the original table also shows the score value of each item. The full test contains 185 items and extends to the age of thirty-seven months.

TABLE XXI (*Cont.*)

Name of Test	*Age-Placement Value (months)*	*Name of Test*	*Age-Placement Value (months)*
71. Partial finger prehension...	7.8	85. Play to mirror.....	9.7
72. Retains two or three cubes.	8.0	86. Differentiates words.....	9.8
73. Vocalizes interjections.....	8.1	87. Rings bell purposively.....	9.9
74. Attends scribbling.....	8.1	88. Puts cube in cup.....	10.4
75. Cooperates in games.....	8.45	89. Scribble imitation attempt..	10.4
76. Exploits formboard and block.....	8.5	90. Unwraps cube.....	10.6
77. Listens to familiar words...	8.5	91. Holds crayon adaptively...	11.2
78. Says "da-da" or equivalent	8.55	92. Inhibits on command.....	11.5
79. Explores formboard holes...	8.6	93. Repeats: laughed at.....	11.6
80. Attempt to secure three cubes.....	8.7	94. Strikes doll imitatively.....	11.6
81. Interest in throwing.....	8.9	95. Imitates words.....	11.7
82. Fine prehension.....	9.3	96. Spoon imitation.....	12.1
83. Pulls string adaptively.....	9.5	97. Holds cup to drink.....	12.2
84. Uses handle; secures cube..	9.6	98. Adjusts round block.....	12.6
		99. Says two words	12.9
		100. Dangles ring by string.....	13.1

react adaptively to more and more events in the world about him. In Bayley's summary we see, for example, the child giving momentary heed to a dangling ring at about two weeks, more prolonged regard at a month, and regard with manipulation at about three months. Evidence of ability to respond to signals and reduced cues appears when he turns his head toward the direction of a sound, or keeps his attention fixed upon an object after it has been covered or hidden. The summary likewise illustrates the development of perception of form, evidences of memory, and increasing ability to understand and to use symbols.

Some Early Signs of Self-Awareness

From an early age the child gives glimmerings and signs of a growing awareness of himself, but these are not easy to piece together, and many of them leave unanswered the question as to how clear the child's perception of himself might be. Among the early signs are evidences of what we ordinarily call "self-consciousness," appearing sometimes at about the end of the first half year when a

child tries, for example, to hide himself, as it seems, in the presence of strangers. There are signs also of what might be interpreted as a kind of self-awareness when a child during early months of life shows what seem to be "hurt feelings" and also when he obviously seems to make efforts to call attention to himself. It is easy, of course, for an adult to misinterpret such signs, and to read his own meanings into them.

One approach to the study of early self-identification has been to note how children think of themselves with reference to their bodies. Horowitz (1935) asked two-, three-, and four-year-olds, and students in psychology, to "localize" themselves (e.g., to a child—pointing to leg, head, and so forth: "Is this Joan?"). One child located herself in the abdomen and lower thorax; another localized herself in her lower right jaw; another in the mouth region of the face. The students mentioned a variety of localization points, including the head, brain, eyes, face, heart, and genitals.[3]

Another approach has been to look for the beginnings of a child's awareness of himself from the point of view of his recognition of differences between his skin color and the skin color of others (Horowitz, 1939). In a study in which Negro children were asked to identify themselves by pointing to pictures they regarded as most nearly like themselves Clark and Clark (1939, 1940) found that light-skinned Negro children chose a white child as being most like themselves more often than did Negro children with darker skins, suggesting that the children identify themselves in terms of skin color, which is to them a "concrete reality," before they identify themselves in terms of "race," which apparently is a more sophisticated concept.

There are many indications that the child at first does not have a clearly differentiated picture of his own body or the limits of his

[3] In a later study Horowitz (1943) used a set of pictures with preschool children to study self-identification in terms of age, size, and sex and found that while most of the children were accurate in choosing the pictures that identified their sex and while most of them were accurate in identifying their age and size, there were some who were confused even on these relatively elemental points of self-identification.

bodily reach and dimensions and that he does not, at first, see himself as clearly set apart as a creature who has distinct features that mark him as someone separate from others. In a study by Zazzo (1948) it was noted that a child who was observed from the time of early infancy until the age of about three years recognized others in the mirror and in pictures before he recognized himself. There was a period during which the boy apparently did not see his own image, or pay attention to it.

Observers have speculated concerning the approximate age at which a child becomes aware of his separateness from his mother and begins to have a notion of his own independence. One estimate places this roughly at about a year.

A study by Ames (1952) gives data drawn from direct observation of children pertaining to evidences of children's awareness of themselves. According to Ames, the infant "discovers himself" during the first year; he "finds a place in, yet an apartness from, the outside world."

The observations regarding the beginnings of self-awareness suggest that this process does not consist of any single or unitary state of awareness which takes place at a given moment; rather, it seems to be quite complex and suggests that a child perceives different aspects of what he eventually calls himself with varying degrees of clarity at different times (see, for example, a theoretical account by Sarbin, 1952). His awareness of his distinctness from others seems to take place while he still has not gone very far in the development of perception and conception of the qualities, characteristics, and properties that constitute what he calls himself. As a matter of fact, the process of self-discovery is actively going on at least as long as the child is growing and is developing or discovering new potentialities, and in the healthy process of self-development this discovery of self continues as long as a person lives.[4]

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[4] A discussion of theories and findings regarding self-understanding and self-acceptance in relation to the subject of personality development is given in Chapter Nineteen.

Memory

Recollections of the past play an important part in the mental life of an older child and an adult. The present takes much of its meaning from the past. But the infant has little or no past to draw upon (unless he can draw on ancestral memories as some poets have imagined). In an older person, experiences of the past influence not only what he perceives in the present but also how he feels about what is happening. Associations of an inner or subjective character, arising from past experience, determine to an important degree a person's awareness of everything he sees, hears, tastes, smells, or touches.

By the time one is an adult it is difficult, and probably impossible, to experience a sense impression in its pure and primitive character, for everything that strikes our senses is likely to arouse some kind of an association and to produce some kind of an interpretation based upon past experience.

Early Signs of Remembering

One of the early signs of ability to remember appears when the child ceases crying at the sound of someone's approach or adjusts himself to being lifted at the sight of a person. Later come other evidences, such as the ability to discriminate between the familiar and the unfamiliar.

The development of ability to retain impressions and to act in terms of past impressions even though the objective stimulus is absent represents an important feature of the child's widening mental world. We see signs of this when a child keeps his attention fixed upon an object that has disappeared from sight, as when he proceeds directly to get hold of a spoon that has been covered with a napkin, or keeps his eyes fixed on the door through which a person has disappeared, or turns his attention back to a task which has been interrupted for some moments.[5]

[5] Studies of the ability to act upon impressions after a delay or lapse of time have been reported by Hetzer and Wislitzky (1930), and Skalet (1931).

Following is an example of this ability to retain and to act upon a past impression: At the age of ten and a half months, while visiting her grandparents, a child watched as her father hid a cookie under the cushion of a sofa. The child then was taken from the room for three minutes. At the end of the time she immediately crept to the sofa and got hold of the cookie. Two and a half months later the child again was taken to the grandparents' house in the late afternoon. She immediately went to the sofa, lifted the cushion, and whimpered, apparently disappointed at finding no food. The child clearly was "remembering" and acting in terms of an expectation built upon past experience. Such remembering takes place on a vast scale early in life many months and even years prior to the time referred to in the earliest memories that can be recalled by an adolescent or an adult.

As might be expected, children improve as they grow older in their ability to remember. In a study of the latent memory span of two- to four-year-old children, Mallay (1935) measured the extent to which children could remember over a period of time the techniques involved in opening some boxes. In dealing with the easiest problem, involving a rather simple movement of pushing, pulling, or lifting the lid, the number of days during which the children remembered the correct technique, without fumbling or redirection, ranged from about three to eight days at the two-year level, from about nine to fifteen days at the three-year level, and from about seven to twenty days at four years.

Early Memories

The subject of early memories is interesting both from a personal and a scientific point of view. (If the reader has not already speculated about this matter he might find it interesting, before going on, to try to make a mental note of some of the earliest happenings in his life that he can remember.)

A person's earliest memories are, for him, the most clearly formulated conscious link between his present existence and his early childhood.

There is something baffling and something almost frightening in the experience of trying to reconstruct the past and in trying to build a chain of memories back to one's earliest years. For most people, the thread of remembered experiences is broken at many places, and the earliest memories go back to a time that actually is not very early in one's life. As will be noted more particularly below, many people cannot remember anything that happened before the third or even the fourth year of life. Even then the recollections usually are spotty and do not bring back any large or continuing flow of experience as it was at that time. Yet by the age of three or four and even by the age of one or two events of great importance have happened. The child we once were, and whose existence is now so completely beyond recall, knew anger and fear, pride and shame; he entered into meaningful and fateful relationships with others; and he acquired the beginnings of significant and perhaps lifelong attitudes concerning himself. One's adult intellect, which deals so proudly and confidently with the present is, in a sense, cut off from momentous experiences early in life. One's adult mind is like an island separated from the mainland of the past.

From one point of view this condition might be regarded as rather fatalistic. For, in theory at least, during these early years attitudes toward self and others have been formed and these may exert a significant influence on a person's ways of thinking and feeling and on his philosophy of life until his span of years is over. His attitudes as an adult and even the roots of the convictions he regards as outcomes of careful reasoning and scientific thinking may stem from past experiences which are lost in the oblivion of the past. Much that an adult takes for granted and views as something in the nature of things may simply reflect a quirk or caprice of his early experience.

The ways of thinking, feeling, and behaving which have been influenced by experiences of which a person has no awareness, which he is unable to remember or re-examine or review, constitute a part of what some writers have called the "unconscious" within a person's make-up.

The fact that experiences of a period of life with which a person has lost contact may influence him in ways that he does not recognize is challenging and in some ways disturbing. However, as pointed out elsewhere in this book, if a person's present existence is being influenced by experiences of the forgotten past the fact still remains that the past, in one way or another, still lives in the present, and this means it is not completely out of reach or beyond review. A person may be able to observe the effects of past experience and become aware of the irrational nature of these effects even though he may not be able, even with the best clinical help, to reconstruct or resurrect the initial experiences.

In other words, even if we assume that experiences occurring in the forgotten period of childhood might have a fateful bearing on the course of a person's life, we do not have to assume that the person is completely helpless and blind and at the mercy of what once happened to him. As long as influences from the past exert themselves in the present there is a possibility of examining these influences, or, at least, their effects, even though one cannot re-examine their origins. On the other hand, if happenings of the past do not influence a person's present way of life in any manner that he or anyone else can discern, then these past experiences do not have much meaning anyhow. They may be dismissed much in the same way that in day-to-day living we dismiss countless details of experience through a process of forgetting that takes place on a vast and continuing scale.

This point of view with regard to early memories does not make them any less significant. As stated earlier in this book, to understand children by way of the study of child psychology it is necessary for a person, as far as possible, to try to understand his own childhood. Unless he can at least probe to some degree into his own childhood he probably will not go very far in probing into the childhood of others, except in a rather external and academic way. One important feature, according to this point of view, in understanding childhood is to seek to understand one's own childhood, not simply in the past tense but in the present tense as it affects or

might affect one's present way of life. From this standpoint the subject of early memories is not just a matter of academic interest but a matter of personal interest.[6]

In one study in which an effort was made to verify the occurrences reported as early recollections, it was found that the average age of the earliest reported memory of college students was three years and seven months.[7] In the literature there have been claims to the effect that individual persons have recollected happenings that occurred during the first year of life, extending as far back as even the day of birth. However, it would be necessary to have further verification before such claims, especially those relating to the first few months of life, can be accepted as true.

From a theoretical point of view, there is reason to doubt that the child's earliest experiences are of such character that it is possible for a person to recollect them when he is mature. He needs to grow and to learn before he acquires the capacity on the one hand, and the experience on the other, to enable him to perceive and to catalog events in the same manner as an older person. Moreover, until he has acquired the ability to use language, he lacks an important means of formulating the experiences in terms of symbols that he can communicate.

Experiences may, however, leave a residue whether or not they are well defined or clearly understood. An example of the manner in which impressions can leave their mark on a child is shown in an interesting study by Burtt (1932, 1937, 1941). Passages from Sophocles in the original Greek were read to a child (who had no other contact with Greek) when he was no more than fifteen months old; twenty lines were read to him daily for a period of three months, and at the end of each period a new selection was read. This reading was continued until the child was three years old. When he was eight and a half years old, the same passages, as well as new ones, were read to him; but he was now required to memorize the lines.

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[6] For a review of records of early evidences of memory, based upon biographical records of children, see Hurlock and Schwartz (1932).

[7] Dudycha and Dudycha (1941) have published a review of thirty-five studies dealing with the subject of early memories.

To commit to memory new passages that never before had been read to him required an average of 435 repetitions, while an average of only 317 repetitions were needed for passages that had been read to him when he was a baby. Thus he showed the effect of past impressions, even of material that had been read to him between the ages of fifteen and eighteen months.

Again, when this child was fourteen years old, he undertook to memorize Greek passages, some of which had been read to him before the age of three and some of which were new. This time, the difference between the effort required to learn "old" and "new" material was appreciable but much decreased. A final check was made when the child was eighteen years old. At this age no difference was apparent in the number of repetitions required to master new and old passages.

Factors Influencing "Early Memories"

What accounts for the early memories that a person happens to call to mind? Why should certain episodes or items of experience be remembered when so many happenings have been forgotten? A partial answer is found in the fact that many of the early memories have reference to an emotional experience that probably was more intense or more prominent than other happenings at about the same time of life. In a study by Dudycha and Dudycha (1933), fear was reported in connection with 30.4 per cent of the earliest memories reported by college students; joy, 27.9 per cent; anger, 10.3 per cent; wonder and curiosity, 8.1 per cent; pain, 5.2 per cent; shame and guilt, 2.6 per cent; miscellaneous emotions, 3.8 per cent; no emotion indicated, 5.2 per cent. These percentages indicate that there is an emotional tone in most early recollections, but they do not reveal much beyond that.[8]

This question is one that needs more careful study than it has received. It probably is not by accident alone or by reason of frequency of occurrence alone that one person now in his late teens

[8] A study by Child (1940) deals with the subject of early memories in relation to personality development.

or older recalls in his earliest memories a time when he was frightened, or helplessly angry, or deeply ashamed, or excited with joy. What we remember from the past will probably be influenced not simply by the nature of the happening in the past but also by the manner in which this happening fits into and is congruent with a continuing life history. On this theory (and it must be presented as a theory rather than a fact) a person whose earliest memories pertain to an experience in which he was angry because someone was unfair to him, as he saw it, might be a person with at least a shade more of a disposition to feel a grievance concerning his past or concerning his relations with people than one whose first recollection deals not with anger toward others but, let us say, with an experience of shame or fear.

Similarly, if one's earliest recollection deals with an experience of being ashamed, one is perhaps now slightly more disposed than could be expected simply by chance, toward an attitude of self-disparagement in his present way of life.

On this theory, a person's early memories may tell us more about his present attitude toward himself and others, or about the attitudes he would like to maintain, than about the actual balance of events that occurred in his childhood. If he now has a tendency to feel that life has treated him unjustly, his early memories may confirm this. If he has a tendency now to blame himself, he may remember experiences in which he felt guilty or unworthy. If, in his present state, he is openly troubled with sexual conflicts, some of his earliest and most prominent recollections may involve experiences pertaining to sex.

Tendencies within the personality may even have played a part in influencing the impact of the experience that an early memory refers to. The fact that the remembered event stood out so prominently at the time it occurred may be due in part to the fact that the youngster already was set to be impressed or frightened or angered by certain kinds of experience and not by others. As an adult, he remembers, let us say, a time when he was put to shame at about the age of three and a half years. But this event may stand out now, and may have stood out then, not because the humiliation

in itself was greater than that suffered by another child who also was put to shame but forgot about it, but because he already had a tendency at the age of three and a half to be vulnerable to humiliation. Similarly, if his early memories concern a time when someone made an improper sexual advance toward him, or at least he thought someone made an improper sexual advance, the reason may be, in part, that he already in his earlier experience had come to view sex with a particularly intense kind of fascination or fear.

What has just been said about early memories probably may also be said about mental life in general. We tend to be impressed, to perceive, to remember, and to imagine in ways that are in keeping with our prevailing mental attitudes and modes of thought. However, the small collection of early memories a person happens to be able to think of when he reviews his past may be too fragmentary, and too detached, to enable him to see how they might fit into the conditioning of his experience even if the above line of thought is correct.

Capacity for Attention and Concentration

One important accompaniment of mental development is an increase in the child's "staying power," in his ability to keep his attention concentrated upon an idea or a task. This ability has been called "duration of attention," "interest span," and "persistence." Except in response to urgent physical demands, the young child's concentration span usually is brief. When he fixates an object with his eyes, his regard is likely to be fleeting at first and to lengthen with time. Of course, the span of concentration is no unitary ability, for it will vary in different situations and it depends not simply on the child's energies but upon his interests and motives. For example, as we noted in earlier chapters, at a certain phase of his development a child will concentrate at length on walking, or on repeating certain sounds, but his attention might flit quickly hither and yon when he is occupied with other things.

An exact measure of increase in attention span with age would be difficult to obtain; the results would vary with different children

and in different situations. It is possible, however, to trace the rise in duration of attention in some situations. In one study in this area, Miles (1933) measured the length of time children would continue to give sustained attention to a delayed happening. Each child was presented with a jack-in-the-box and asked to watch it until it was opened. The experimenter timed the child until he looked away. The average duration of sustained attention, according to this criterion, as exhibited by the children in this study was eight seconds at three and four years, about seventeen seconds at five years, and about twenty-eight seconds at six years. In a somewhat different approach, Shacter (1933) timed children to see how long they would persist, without further persuasion, at such a little task as taking colored paper disks out of a box and laying them in rows across a table. On the simplest task used in the study, the average duration of attention ranged from a little over eight minutes at three years to a little over nine minutes at five years (the differences between three-, four-, and five-year-olds were not significant, and there were large individual differences).

Another approach to this problem has been through observation of the amount of time children will spend upon a project, without interruption or turning to something else, during their free play. Table XXII summarizes results from three studies. The averages differ considerably, due in part to differences in the situations in which the children were observed and also to differences in the criteria as to what constituted an "interruption" or abandonment of an activity.

In spite of these variations, the findings in the three studies agree on some points. First, it is apparent that the average span is relatively short throughout the age range included in the studies. Second, there is an increase in the averages from year to year.

This increase is quite large in relative terms but in no year do the averages show a marked and sudden rise in terms of actual minutes of time. The tables do not reproduce the large individual differences among different children; nor do they reproduce the large variations that can be found in the behavior of the same child at different times. In the study by Gutteridge, for example, it was

found that a child might devote himself uninterruptedly to a given project for an hour or longer and then, on several other occasions, spend only a few minutes at a time on this or that project. It has also been observed that the amount of persistence on the first occasion of dealing with a given project does not give an accurate prediction of the length of time the same project might appeal to a child when he meets it again. For example, it was noted by Wolf (1938) that the median amount of time spent by kindergarten children in working with a peg board was 5.7 minutes on first presentation but that on the second presentation the median was 7.1 minutes. A tinker toy, on the other hand, held the children for 22.5 minutes for the first time, 15.5 minutes the second time, and 9.5 minutes the third time it was offered.

TABLE XXII

AVERAGE DURATION IN MINUTES OF SUSTAINED ATTENTION DURING CHILDREN'S FREE PLAY AS SHOWN IN STUDIES IN THREE DIFFERENT SITUATIONS[9]

Age in Years	*Average Duration of Sustained Attention*		
	According to Van Alstyne[a]	*According to Bott*[b]	*According to Gutteridge*[c]
2	6.9	2.5	9.4
3	8.9	4.7	13.4
4	11.4	5.6	18.97
5	12.6	...	23.82

[a] D. Van Alstyne, *Play Behavior and Choice of Play Materials of Preschool Children* (Chicago: University of Chicago Press, 1932), 104 pp.

[b] H. Bott, "Observation of Play Activities in a Nursery School," *Genetic Psychology Monographs* (1928), IV: 44-88.

[c] M. V. Gutteridge, *The Duration of Attention in Young Children*, Australian Council for Educational Research (Melbourne: Melbourne University Press, 1935), 52 pp.

The length of time children persist in a performance varies also under different conditions of motivation. On five tasks in the study cited above the average duration was 7.2 minutes when no special incentive was offered; when the children were praised, the average rose to 10.9 minutes; and in a competitive situation the

[9] See accompanying text.

average rose still further to 17.2 minutes. The responsiveness of individual children to these different incentives also varied.

The ability to stay with a problem or project represents an important feature of effective use of one's mental abilities. As a child grows older, he acquires the ability increasingly to organize and control his behavior in terms of interests and purposes as distinguished from the appeal of a passing, external event.

Children's Questions

From early infancy the child is an explorer and his curiosity takes many turns. Once he has learned to talk, his curiosity expresses itself through a vast number of questions. The child's questions may serve many motives in addition to curiosity, for sometimes the purpose of a question is to establish social contact, or to receive attention, or to gain reassurance, solace, or help. Children may even use persistent questioning as a form of resistance or as a means of expressing resentment. Again, questioning sometimes seems to represent a general outflow of language spoken for its own sake without apparent expectation of an answer. As noted elsewhere, a young child practices his language a good deal, and part of this practice may take the form of raising questions.

In one study (Fisher, 1934), it was found that the proportion of questions in children's language during the nursery-school day rose with age from 2 per cent at eighteen to twenty-four months to 15 per cent at three years. At the age range from thirty-six to fifty-four months, the proportion was about 11 per cent. A study of children's language at the kindergarten level showed that about a tenth of children's remarks were questions (Rugg, *et al.*, 1929). In relative terms this percentage is not so large, but it is clear that at this rate the average child will ask a staggering number of questions during the course of a year or so. A larger proportion of questioning would no doubt have been found had these children been studied exclusively in the company of older children and adults, rather than in the company of their peers.

In a study of one child in the home environment it was found

that questions occurred at the rate of thirty-one per hour when the child was thirty-eight months. This constituted 18 per cent of her conversation. At fifty-two months the rate was thirty-three per hour, and 20 per cent of her conversation was questioning (Brandenburg, 1915). An even higher rate of questioning was shown by another girl whose language was recorded for a time at yearly intervals from her second to her eighth year. Her questions rose from 2 per cent of all her conversation at two years to 28 per cent at three years. In the interval from four to eight years, questions constituted about a fifth of her total conversation (Boyd, 1926). Even if we assume that many of these questions were not asked with a serious intention of getting an answer, and even if we assume that in much of her questioning she was talking to herself, these figures are still very impressive.

In a study of the questions asked by eight two- to four-year-old nursery-school children (Coan, 1939), it was found that the questions were about equally divided between inquiries that seemed designed primarily as a means of social interchange and questions that seemed definitely designed to elicit information. Children differed considerably in their use of the two types of questioning. The investigator noted, in passing, that the technique of turning a question back upon a child, as a means of getting him to think things out for himself, did not work well with some children, for the children would proceed to address the same question to others. Also, after having questions thrown back at them, they tended to ask fewer questions.

The questions raised by children vary with their changing abilities and interests. Thus, when a child is in the "naming stage" in his language development he is likely to ask many "what" questions to learn what things are and to acquire names for them. The youngster may likewise go through a "Who is that?" period during which he wants to know the names of all people who pass by. Such questions usually precede "why" questions, dealing with casual relations in everyday happenings or with reasons for another's behavior.

Davis (1932) gives an analysis of 3,650 questions asked by seventy-

three children aged three to twelve years. The questions were recorded by parents and relatives at the time they were asked. Of these questions, 87.8 per cent seemed to arise from something in the immediate situation, as distinguished from questions about remembered or remote events (which constituted 10.8 per cent; 1.4 per cent could not be accounted for). A novel occurrence was more likely to provoke a long series of logically related questions, but frequently ordinary situations also provoked such a series of questions. Boys asked more questions involving causal explanation than did girls, while girls exceeded boys in questions regarding social relations.

The following illustrations of questions asked by preschool children (above average in intelligence) are from data collected by Rust in a study of the growth of children's concepts.[10]

The following conversation began after the child (who was four and a half years old) had been told a story about a six-year-old girl:

Child: I'm four, aren't I?
Mother: Yes, four years.
Child: What's a year?
Mother: (*Explains.*)
Child: Is that a long time?
Mother: Quite a long time.
Child: How long?
Mother: It's hard to explain, but it is a lot of days, 365, and that's many.
Child: Well, but how long?
Mother: Well, well, you know when it was Christmas.
Child: Oh, yes, and I had a tree, and once I had a tree in the corner and once I had it on the table.
Mother: Well, that was twice, and it takes a year to have a Christmas. You see we have Christmas, then the time between that Christmas and the time between the next is a year.
Child: Well, that's a very long, long time. When I was very small we had a Christmas. Is a year a birthday?
Mother: Well, you have one birthday, then the time between is called a year, then you have the next birthday.
Child: Yes, three then four—then five— Say, how old are you?

[10] M. M. Rust, *The Growth of Children's Concepts of Time, Space, and Magnitude*, unpublished (Teachers College, Columbia University). Reproduced by permission.

Mother: Thirty.
Child: How did you stretch up?

This turn in the conversation appeared to suggest another line of questions to the child. She immediately continued:

Child: When I'm thirty will I be a mother?
Mother: If you have a baby you will.
Child: Do all womans have babies?
Mother: No.
Child: Why?
Mother: Some are not strong enough, some are too busy doing other things—some . . .
Child: Well, in three or six weeks when I'm thirty, I shall have a baby— Where do babies come from?
Mother: Seeds.
Child: Where do the seeds come from?
Mother: The father and the mother.
Child: Where does the father keep his?
Mother: They're in his body.
Child: Oh, is he keeping them warm same as the mother does the baby?
Mother: He doesn't have them there to keep them warm, but because they belong there.
Child: Well, when I'm six weeks I'll marry you because you're so cute.
Mother: But— (*Father comes in.*)
Child: Hello, Daddy. Did you buy me something? (*No further questioning.*)

The following questions and comments of a four-year-old child deal in part with concepts of time:

Child: Is this today?
Teacher: Yes, why?
Child: Well, is tomorrow tomorrow?
Teacher: Yes.
Child: Well, Sunday is my birthday.
Teacher: Do you know what date this is?
Child: Yes, it's March 5 and I will be four years old. That's this many (*counts down four buttons on his coat*).
Teacher: That is right, Frank.
Child: Some day I will be this old (*stretches out his arms at full length*).

The problem of time was the subject of the questions of another child, aged four and a half.

Child: What time is it?
Mother: 6:30.
Child: What means that?
Mother: What do you mean?
Child: What means 6:30?
Mother: Well, when it's evening it means time for you to think of bed and time for me to get dinner.
Child: How long is 6:30?
Mother: Just one minute, then it is 6:31.
Child: Is a minute big?
Mother: No, very short.
Child: Just a little bit like this? (*Demonstrates with finger and thumb and a tiny pinch.*)
Mother: I'll show you with my watch.
Child: (*Watches watch for a minute or two, then speaks.*) Do you like me, Mummy? (*Dismisses subject of time.*)

The same child, at another time, ended a series of questions concerning the days of the week with the query, "Where does time go?"

Many of the questions raised by young children are difficult if not impossible to answer. Sometimes an adequate answer would go beyond the child's comprehension or willingness to listen (e.g., an answer to the question by a three-year-old, "Where is the people in the radio?" or "What makes the subway run?"). Sometimes the adult is at a loss how to put his answer (e.g., "Who made God?").

As indicated above, children's questions may spring from motives more pressing than intellectual curiosity. There may be fear, worry, or uneasiness. A child who has been frightened by an animal may ask about any new thing that he sees, "Has it got a mouf? Does it bite?" The child of a mother who works away from home a good deal may ask, repeatedly, on seeing an unaccompanied adult or a child, "Where is his mamma?" A three-year-old boy raised many questions after the slaughter, at his home, of two pigs that had been reared there since they were little. "Why did you butcher Blackie and Whitie?" (the pigs). When told (as

he had been told repeatedly beforehand) that pigs are butchered for meat when they are big and fat, he asked, "Will me and—(naming his sister) be butchered when we are big?" On later days he asked such a question as, "Do people close their eyes when they are dead?" After one such question, he asserted firmly, "When I be dead I won't close my eyes and I'm going to run around." (In this remark he seems to show resistance to the idea of death.) Apparently it was the idea of death rather than the demise of the two particular pigs that bothered him, for he later identified parts of the pigs at table and ate with great relish.

The following (also from Rust) is another example of a child who was puzzled about death:

Child (*four and a half years old*): Mummy, what means a dead mother?
Mother: A woman that has died and does not walk or talk any more.
Child: But what will the children do?
Mother: Well, if a mother should die, the father would take care of them and maybe an aunt.
Child: Will you be a dead mother some day?
Mother: Why yes, though I don't expect to be for a long time.
Child: A *very* long time?
Mother: Yes.
Child: But I don't want you to die; I want you here like this.
Mother: Well you will probably be quite grown-up before that happens.
Child: A *long* time?
Mother: Yes.
Child: But what *means* dead, mummy?
Mother: Well, your heart stops beating and you lie still without breathing.
Child: And what do you do with the talking part—you know, the inside talk?
Mother: I'm not sure, but some people think you live in another world and, of course, some don't.
Child: I guess we do (*excitedly*). Yes! And then you die in a *long*, long time—a *very* long time, and then I die and we both hug each other and then you won't have any wrinkles— Oh, look at that cute pussy? Isn't she darling? (*Runs off.*)

It often happens that a child will continue to repeat a question after an adult has given an answer. Such repetition may be aimed

at getting attention, but it may also mean that the child is still puzzled or troubled. To answer a child's question it is, of course, first necessary to understand the question. Sometimes the meaning of a question is not so obvious. If an adult would understand the more elusive questions he must prepare to be sympathetic and patient. It is also helpful if he is genuinely interested. Moreover, some questions cannot be understood without some knowledge of what has gone before in the child's life. A child might, for example, ask again and again during an afternoon, "Are you going to put the car in the garage?" This repetition becomes more understandable when the parent realizes that the question really means, "Are you going to stay home or are you going out this evening?"

In trying to fathom the meaning of a child's question it is well, on the other hand, not to read too much into his inquiry. An example of this occurred in a home in which there was a two-and-a-half-year-old girl who had just received a new rubber doll. She held it up for both father and mother to see, saying, "See my baby?" Then she said, "Where baby come from?" The father thought the child was asking her first question about the origin of babies, but before he could gather his wits to give an answer worthy of this great occasion the mother simply said, "Woolworth's." This answer suited the child perfectly, for all she apparently wanted to know was whether the doll had been bought by her parents in the store or had been mailed to her as a gift.[11]

In trying to satisfy the questioning child it is important, of course, to try to answer the question he has in mind even though the inquiry may not be too clearly put.

From Concrete to Abstract

As children approach the elementary school level they have many questions and much curiosity about the world immediately around them but most of their interests are concrete and concern immediate things. Many children in this stage also show a desire both

[11] For additional findings concerning children's questions, see Baker (1945).

to think concretely and to handle and manipulate things. To such children, the immediate physical environment is alluring.

Many youngsters who ultimately will prove to be adept at abstract thinking and abstract planning now do some of their thinking, as it were, by way of their hands and feet. In building a small boat or train or in constructing an airplane out of wood or in building such useful things as a little bench or a wooden shelf they combine thinking with fingering. They do not lay out a careful plan, or make exact measurements in advance for each piece. Instead, they cut, saw, fit, and hammer as they go. As a result, many pieces may be discarded, or a cabinet may have shelves of unequal width and length, and in doing anything as fancy as fitting a dowel into a hole there may be a great succession of fitting, sawing, rasping, refitting, and so on, before the proper fit has been made. And, if something so advanced as the fitting of a door with hinges is undertaken, two hinges may on first trial be so attached that they operate in opposition to each other.

This is the time when the young carpenter wastes good lumber, the young painter wastes good paint, and the young artist wastes good paper, as well as a few other things. But it seems that many children go through a phase of wanting to construct, and even to create or improvise with things before they have reached the phase in which they can give careful thought to dimensions, measurements, and proportions. To punish a child or to give him materials only on condition that he thinks before he acts and measures before he saws may simply discourage the child from further effort. It seems quite possible that a youngster who is deprived of materials or punished for errors of measurement when the urge to build and fashion things is strong will recoil from the activity later on. Some such youngsters, it seems (at least as observed by the writer), when finally they do have the money to spend and the material to use (or to waste) find themselves so clumsy that they give up or find that they must go through some of the process of trial and error and clumsy mistakes which they were denied the opportunity to go through when they were younger.

The way in which the young child's curiosity and efforts to understand the world about him are linked with his total activity as a person has been observed by Almy (1949):[12]

> The learning of younger children so obviously involves activity. They pull the covers off all the pots and carefully fit them on again; they climb to the top of a chest to discover the contents of a basket they can barely see from below; they sort out enough knives, forks, and spoons to set the family supper table; they dig out recently planted seeds to see what has happened to them; they unscrew the loose bolts on their tricycles. With each episode they acquire a little more understanding of the world in which they live.

Often, however, the efforts of the eager little scholar get a serious setback when he begins to go to school (which is supposed to be the seat of learning). As Almy puts it, "In many first grades, however, there is not only little opportunity to move about and explore, but the materials provided actually offer the child less chance to feel, touch, taste, take apart, and put together than he has in his own kitchen or backyard."

[12] M. C. Almy, *Children's Experiences Prior to First Grade and Success in Beginning Reading*, New York: Teachers College (Columbia University) Contributions to Education, 1949, No. 954. p. 113. Reproduced by permission.

CHAPTER FOURTEEN

The Growth of Understanding (II)

REASONING. CONCEPT FORMATION. SELF-AWARENESS.

By the time a child has reached elementary-school age, he is capable of most, if not all, of the kinds of intellectual operations that are found in the mental life of an adult. He can recollect the past and plan for the future. Within the limits of his experience and information he is capable of both inductive and deductive reasoning. He is able to imagine, to daydream, and to give play to fantasy. He is able to deal with some problems on a level of ideas as distinguished from dealings with tangible and concrete things. He can manipulate countless symbols without actually having to handle the physical material or do the physical acts these symbols represent.

On reaching the age conventionally regarded as the time for the beginning of formal education, the child is already a highly trained and very versatile person. However, he still has a long way to go in his intellectual development.

Some broad developmental objectives. During the elementary-school years he will show marked increases in his knowledge and general information, as one would expect. He will show increased ability to deal with the abstract. He will acquire an increasing interest in and ability to deal with affairs in the world at large that do not directly touch his everyday life. He will show an increasing capacity for intellectual teamwork, for understanding and discussing the ideas and viewpoints of others, and for joining with others in the give-and-take of group discussion. He will be able to deal with problems and plans of increasing complexity. He will show an increase in his ability to concentrate his attention on intellectual tasks.

Expansion of Intellectual Horizons

By the age of six the world of happenings and things in which the child dwells has expanded far beyond the cradle and the nursery which confined him at birth. Even so, at the beginning of the elementary-school period a child's intellectual enterprises—his thoughts, plans, and interests—tend to be restricted mainly to things that are near in time and space. During the ensuing years there is a great expansion.

Awareness of people. This expansion manifests itself in many ways. It appears in the child's awareness of and interest in people in the world at large. In the age range from six to eight, in a study by Hill (1930), 58 per cent of the characters named by the children as heroes and ideals were characters who belonged in the immediate everyday environment of the children. At the age of twelve, only 30 per cent of the characters belonged in this category. At the age range from six to eight only about one-third of the persons named by the children were historical or public characters—people in the world at large apart from the child's immediate environment; at the age of twelve almost two-thirds of the characters were in this category. Such findings as these are, of course, in line with what one might expect. Yet they show graphically one of the aspects of growing up intellectually—a process which includes increasing awareness and appreciation of people beyond the confines of the home.

Widened range of response to world at large. The extension of the child's intellectual life takes place also through an increased interest in the world outside his own immediate day-to-day existence. An example of this appeared in a study in which a record was made of what children said during free discussion periods in the classroom. Some of the findings are reproduced in Table XXIII from a study by Baker (1942).

One conspicuous change, as can be seen in Table XXIII, is a decided drop from the second to the sixth grade in discussion of topics relating to a child's own personal activities and experiences. At the second grade, 61 per cent of all contributions dealt with per-

TABLE XXIII

SUBJECT MATTER, CONTENT, AND SOURCE OF EXPERIENCES REPRESENTED IN TOPICS CONTRIBUTED DURING CLASS DISCUSSION IN GRADES II, IV, AND VI[1]

Grade	II	IV	VI
Number of pupils	62	54	45
Subject Matter Content			
Personal Activity	61%	41%	18%
Animals	10	7	8
Books, Radio, Movies	7	13	6
Current Happenings in World at Large	18	29	60
Miscellaneous	4	10	9
Medium of Acquisition			
Personal Presence	83	52	25
Reflection	1	15	18
Other Media (books, magazines, radio, theater, personal conversation)	16	31	56
Unknown	0	2	1

sonal activities and experiences as contrasted with 18 per cent at the sixth grade.

Paralleling the foregoing, there was a corresponding increase from the second to the sixth grade in contributions dealing with world and domestic news, and with activities of people other than the child himself.

In keeping with the foregoing, a change also appeared in the extent to which children were preoccupied with events they had directly witnessed, whether or not they themselves were the main actors in an event. At the second grade most of the topics or items of information discussed by the children dealt with matters that had actually happened in their lives or in their presence—83 per cent of contributions fell in this category. At the sixth grade, however, only about one-fourth of the contributions dealt with matters concerning

[1] This and the following table are adapted from H. V. Baker, *Children's Contributions in Elementary School General Discussion*, Child Development Monographs (New York: Teachers College, Columbia University, 1942), No. 29, pp. 32-33. Reproduced by permission.

which the children had become aware through personal experience or direct contact.

Increase in intellectual teamwork. A very notable feature of intellectual development during the years following the beginning of the elementary-school period is an increasing ability to understand, appreciate, and share the intellectual interests of other persons. There is an increased ability to join in an exchange of ideas and to achieve a meeting of minds with other persons. This line of development is illustrated by the findings represented in Table XXIV. This table, like Table XXIII, is based upon a study of children's contributions

TABLE XXIV

PERCENTAGE OF CONTRIBUTIONS IN CHILDREN'S DISCUSSIONS IN GRADES II, IV, AND VI THAT REPRESENTED A LOGICAL CONTINUATION OF PREVIOUSLY DISCUSSED TOPICS OR NEW AND INDEPENDENT SUBJECT MATTER

Grade	II	IV	VI
Number of Pupils	62	54	45
New Topic, not obviously related to what earlier speaker had said	87%	33%	23%
New Topic, but apparently suggested by something said by a previous contributor	8	24	33
Logical Continuation of a topic previously introduced	4	43	44

during free discussion periods. It may be noted that at the second grade only 12 per cent of the contributions made by the children during class discussion represented a continuation of a theme or topic that had been discussed or suggested by a previous speaker, whether immediately preceding or earlier during the period. At the sixth grade, in contrast, well over two-thirds (77 per cent) of the contributions carried on the elaboration or development of an idea that someone else had introduced during the discussion period. Conversely, most of the contributions at the second-grade level represented "new topics"—that is, the child was simply giving voice to something that happened to be interesting or something that happened to occur to him, and he made no effort to link what he was

saying to what had been said before or to merge his contribution into the treatment of a common topic.

Such changes as these in the child's intellectual orientation are paralleled by developments in other aspects of the child's life. As noted in another chapter, the youngster as he moves through the elementary-school years becomes increasingly able to throw himself into group activities, and with this there is an increased capacity for social interchange also on an intellectual level.

The fact that children acquire this increased capacity for sharing the thoughts of others does not mean, of course, that they are no longer occupied with their own private desires and concerns. The child's own thoughts and feelings, his problems and desires as a person distinct from others, continue to be matters of primary concern to him as was true during earlier years and as will be true throughout life. The process of becoming socialized does not mean that the child surrenders his individuality. Rather the process of socialization means an extension of the child's individuality, so that his mental life encompasses thoughts and concerns that have reference to others and also includes concerns arising within his own immediate, personal experience.

Increased capacity for generalizing. Another feature of mental development during the elementary-school years and beyond is an increased understanding and use of general and inclusive categories of thought. A child at the age of six tends to a much greater extent than a child aged ten or twelve or older to think in specific terms. As time goes on, a child is able increasingly to encompass larger classes or categories as distinguished from the specific item or event.

This ability to think in terms of the more inclusive category or class is illustrated by the responses given by children when they are asked to express their wishes. In one such study, in which children aged five to twelve were asked to give three wishes, the responses were tabulated under a number of headings including one heading that represented wishes for specific material objects and another that included wishes for general benefits for self and others. The percentage of wishes falling in these two categories are shown in Table XXV.

A younger child might wish, for example, for a football, a football helmet, a football suit, while an older child instead of devoting three wishes to different objects might wish for money to buy a football outfit and still have two wishes left.

TABLE XXV

PERCENTAGE OF CHILDREN WHOSE FIRST WISH WAS FOR SPECIFIC THINGS OR FOR MORE GENERAL BENEFITS IN THE AGE RANGE FROM FIVE TO TWELVE[2]

(Other categories not reproduced bring the total at each level to 100 per cent.)

Type of Wish	*All Subj.*	*Age Groups*				*IQ Groups*		
		5–6	7–8	9–10	11–12	120 and above	100–119	80–99
I. Specific material objects and possessions	35.8	55.	48.	26.	14.	23.3	38.3	47.9
II. General benefits for self and others	17.9	8.0	14.	22.	27.	25.6	17.1	8.3

CHILDREN'S REASONING

The quality of a child's reasoning is likely to vary in connection with different problems. In arriving at explanations, generalizations, and conclusions a child who is quite logical in pursuing one line of thought may be very naive in dealing with another.

Many investigations have shown that children are capable at an early age of such reasoning processes as are shown by adults.[3] However, as one would expect, there are limitations when children are called upon to deal with problems that go beyond their understanding and experience. Some of these characteristics also appear in the reasoning of adults when they are on unfamiliar ground.

[2] Adapted from A. T. Jersild, F. V. Markey, and C. L. Jersild, *Children's Fears, Dreams, Wishes, Daydreams, Likes, Dislikes, Pleasant and Unpleasant Memories*, Child Development Monographs (New York: Teachers College, Columbia University, 1933), No. 12, 172 pp. Reproduced by permission. This version omits comparisons between boys and girls and between school groups that are included in the original table.

[3] See, e.g., Burt (1919); Deshaies (1937); Harrower (1934); Hazlitt (1929); Huang (1943); McAndrew (1943); McHugh (1944).

Piaget (1928), as noted earlier, has proposed that there are stages in children's thinking and has maintained that up to about the age of seven or eight years a child tends to reason only in terms of isolated or particular cases, is incapable of a genuine argument, feels no need for verification or logical justification, has difficulty in making generalizations or deductions or in reasoning from the point of view of another person or from the point of view of a general proposition.

It has also been maintained that not until about the age of eleven or twelve years is a child able sufficiently to adopt another's point of view, to reason correctly from another's beliefs, or to carry on formal thought or arrive at pure deductions, and, likewise, that it is not until about this age that the ability to give a logical explanation of casual relationships has completely evolved (Piaget, 1930).

The findings in many studies, however, go counter to the view that there are distinct stages in the development of children's reasoning. To be sure, as a child increases in knowledge and experience, there is an increase in his ability to solve problems of greater number, variety, and complexity, in his ability to formulate answers and to give reasons, and in his ability to reorganize experience and to arrive at generalizations. But these gains are not of such a character that the child's reasoning processes at the age of six are essentially different from his reasoning processes at the age of twelve or eighteen.

It is also true that children's explanations and solutions often are naive, inconsistent, and self-contradictory. But when adults are called upon to deal with wholly unfamiliar material, they tend to give some of the same types of answers as do children. In one such study (Oakes, 1947), the subjects were thirty-five members of the faculty in a liberal arts college. A number of experiments, demonstrating primarily certain principles of physics, were performed in the presence of these adults and the adults were asked to make a prediction as to what would happen or to give an explanation of what would happen. The variety of explanations that were offered included even some statements—twenty-three comments by eighteen different adults—that bordered on the mystical or magical (e.g., "It is a long time

since I studied any science. Maybe nature has changed a little," or "That means the air is misbehaving," or "It seems a bit unfair that the iron doesn't get there first").

It has been suggested that there might be a prelogical stage in the development of reasoning but that American, Canadian, and British children, such as those whose reasoning processes have not confirmed Piaget's pronouncements on French-speaking children in Europe, had already passed through this stage by the time they had reached the age when they were studied.[4] Findings on this point have been reported by Dennis (1942), who asked questions designed to throw light upon his daughter's conception of the world and of the nature and cause of various happenings. At the age of six years and two months this child gave much the same kind of answers as do adults to a variety of questions about the nature and cause of things. However, many of the answers that she gave before the age of three were of a different character. For example, at the earlier age she would give certain explanations that were more on the side of magic than of physical cause and effect. She said, for example, "I move the sun when I go up and down." Also she seemed to believe that she could make the auto run by blowing the horn.

This child also, at first, had such notions as dreams are not something that are produced and occur within the dreamer, but are external happenings. Things originate through human construction (such as, a daddy-man makes daddies, candy is made by a candy-man). Such observations as these are interesting in that they suggest the possibility that there may be a stage during which children think in prelogical, magical, or animistic terms. However, more evidence than is now at hand would be needed to substantiate this point. Moreover, many findings indicate that nonlogical or logical thinking is not an either-or phenomenon. The same child, at a given time, will exhibit both varieties. In the Dennis study, while the child was answering to the effect that a moon-man made the moon, she answered that milk came from a cow.

It has been observed by the writer that children similarly may

[4] A study by Menon (1944) of children in India likewise leads to conclusions differing from Piaget's.

give a naive answer to one question and what seems to be a sophisticated answer to another. One three-year-old, for example, when asked, "What makes the wind blow?" answered, "It blows itself." When asked, "What makes a car run?" she answered, "The motor." It is quite likely that the second answer, which was the more acceptable from an adult point of view, meant little more to her than did the first. In any event, the two answers do not seem to represent two different kinds of thinking but rather, the best explanation or verbal response the child was able to supply, out of his experience, at the moment.

Tests of children's reasoning. Several investigations dealing with children of kindergarten age and upward have indicated that children are capable at an early age of the kind of reasoning involved in explaining cause-and-effect relationships. In one such study (Deutsche, 1937), a number of experiments were performed in the children's presence, such as covering a jar in which was a lighted candle and then asking the child to explain why the light went out, placing pebbles in a beaker of water and asking why the water rose, and the like. When the answers were rated and quantified, there was an increase in the children's scores from year to year. The various types of answers were found over a wide range, and at no age did the children's answers fall into any single type. It was found that causal thinking develops, not by stages, but by a gradual process. Moreover, the answers given by individual children did not fall into a single class; a child might handle quite effectively a problem that touched upon matters on which he was informed and then give a naive answer to another problem. Children's ability to solve the problems was more closely related to their school experience than to chronological or mental age.

Another study by Burt (1919) deals with the ability of English children at various age levels to reason inductively—that is, from the particular to the general—and their ability to handle arguments that proceed by eliminating in succession each of a number of alternative hypotheses except the right one.

In this study it was found that there were differences between the ability of older and younger children to handle problems of varying

degrees of difficulty and complexity but that there was no evidence that the reasoning processes of the younger children of elementary-school age differed in kind from the reasoning processes of older children.

At seven years, for example, the children could solve this problem:

Tom runs faster than Jim; Jack runs slower than Jim: Who is the slowest, Jim or Jack or Tom?

Seven-year-olds also found the correct answer to the following puzzle:

It is Sunday, and on a Sunday afternoon Ada usually takes the baby out, or goes by herself to the pictures, or walks over to see her aunt, or else goes by train to the cemetery. Today she has no money with her and the baby is asleep upstairs. Where do you think she has probably gone?

At eight years, the children solved a problem, such as this, which likewise called for elimination of untenable hypotheses:

I don't like sea voyages, and I don't like the seaside. I must spend Easter either in France, or among the Scottish Hills, or on the South Coast. Which shall it be?

It was not until a later age, near the end of the elementary-school period, however, that the children were able to solve a problem calling for the discovery of a general rule from a number of particular instances, such as:

One pound of meat should roast for half an hour; two pounds, three-quarters of an hour; three pounds, one hour; eight pounds, two-and-a-quarter hours; nine pounds, two-and-a-half hours. From this, can you discover a simple rule by which you can tell from the weight of a joint how long it should roast?

Children at a given age level are likely, of course, to differ in their ability to solve such problems as the foregoing.

Ability to reason from the standpoint of an abstract proposition. As indicated earlier, children show an increase with age in knowledge of and ability to deal with the abstract. This appears in their ability to apply a general proposition to a specific case, as in an

earlier illustration. It also appears in the eventual development of ability not only to apply a general proposition which they know or believe to be true but also the ability to reason in terms of an hypothesis which for the time being is supposed to be true. Eventually, also, a large proportion of people are able to reason from the standpoint of a proposition that is contrary to fact (e.g., If Thomas Dewey had been elected President instead of Franklin Roosevelt in 1944, it is likely that . . . .). Some persons also eventually achieve, with varying degrees of success, the ability to reason in terms of a proposition that is contrary to their own desires. This ability to reason in terms of hypotheses contrary both to fact and to desire represents a decided advance beyond thinking in concrete and wishful terms.

Observation of children indicates that they vary greatly in ability to reason from the point of view of an abstract proposition that goes counter to their wishes. The writer observed an example of this in a fifth-grade class. The children were reporting current events. One boy before World War II reported his current event in the form of a question or riddle: "There will be no war if the President of what country gives in to Hitler's demands?" At the time, Hitler was making demands on Czechoslovakia and the idea behind the boy's question was that if the head of the Czechoslovakian government yielded, Hitler would not start a war. When no one else could answer, the boy himself answered that if the President of Czechoslovakia yielded to Hitler there would be no war. But many children protested that this answer was wrong. When the teacher let the children debate the issue, it was apparent that most members of the class were arguing the merits of Hitler's demands and not the merits of the boy's answer. The argument was: What right has Hitler to ask for this territory? How would you like it if you were a Czechoslovakian? and so on. The boy who first raised the issue tried to maintain that he was not arguing the merits of the demands, he was simply arguing that *if* the Czechoslovakians yielded there would be no war between Czechoslovakia and Germany. When a vote was taken almost every pupil in the class voted that the boy who had presented the proposition had lost the debate.

This episode is cited as an illustration of failure to grasp an abstract proposition. It is not presented with the suggestion that this kind of failure is characteristic of children alone, for adults also often, of course, reason in the same way.

Other differences between the reasoning of older and younger persons. In various studies it has been found that when older and younger persons are confronted with a similar problem some, if not all, of the older ones will tend to be more deliberate in their procedure, to turn the matter over in their minds, so to speak, whereas a child is more likely to forge ahead in overt trial and error. Also, as one would expect, adults are likely to reach a conclusion or correct answer more quickly and to see the point more readily. Moreover, adults are likely to have more patience and to show more persistence in dealing with a difficult problem. On all these points there are, of course, large individual differences both among children and adults.

Another difference between an older person and a young child is that the older person is likely to be more resigned to the inevitable and to accept the objective fact. At the age of two and a half a child may ask, for example, for more prunes and then reply, when told that there are no more prunes, "Yes there are, because I want some." At the age of five or six, when confronting a similar situation, the child's reaction if he desires prunes is less likely to take the form of arguing or insisting that there actually are some prunes in the kitchen. Instead, he is likely to accept this fact and then express his disappointment or desire by complaining that he still is hungry or scolding his mother for not providing a large enough supply.

Another difference appears in the fact that the younger child tends to express himself more frankly and freely than does an older person. A young child, to borrow a phrase from Piaget, "has no verbal continence" (1932). The greater tendency on the part of the child to speak what is on his mind does not, however, mean that there is a corresponding tendency to inquire whether the other person is interested and following the line of talk.

Examples of children's misconceptions. Practically all adults can recall from childhood many erroneous impressions, false beliefs, and misinterpretations of words and phrases. Such misconceptions throw

some light upon the difficulties which children have in formulating their ideas and in grasping the meaning of what they hear and see. It would be more revealing if somehow it were possible to obtain cumulative reports from children themselves, for an adult will have forgotten many temporary misconceptions that he entertained as a child and he is especially likely to forget the ways in which his ideas constantly were being revised, supplemented, and clarified. (It may be added that misconceptions are not, of course, limited to children.)

Among children's misconceptions are many that take the form of mistaken beliefs, frequently arising quite by chance or through the solemn testimony of a playmate. Unless a child, through somewhat bitter experience, has learned to distrust others, he is prone to accept as true anything that is told to him and that is not contradicted by his own experience or by some higher authority. Such beliefs may also influence his actions. Following are examples from one child: He accepted the superstition that a swallowed hair turns into a worm once it gets into the stomach; that a swallowed apple seed would sprout in the stomach; that a withered spot on the lawn or in the pasture meant that the ground was hollow underneath and that, if one landed on such a spot hard enough, he might sink all the way to China; that the devil came when people whistled.

A child's ideas concerning sex are especially likely to involve many mistaken notions if they are obtained from the back alley or if his elders deliberately try to frighten or mislead him with falsehoods. Numerous misconceptions may likewise arise through deliberate or half-joking remarks which adults make concerning individuals against whom the adults are prejudiced. Such falsehoods are often elaborated by children and passed on to others. Thus a boy of nine believed that members of a certain small Protestant sect could spit blood whenever they wanted to and that one would catch a bad disease if one went to a toilet that had been used by members of another sect.

It should be recognized, of course, that adults also are quite gullible, especially in matters that concern their own desires. Also, many childish misconceptions persevere into adult years; and even when erroneous ideas that were entertained during childhood have undergone correction, there still may be residual effects of the earlier

images and beliefs. One of the arts of the demagogue is to appeal to such childish images and attitudes.

Many of the more obvious misconceptions simply concern misinterpretation or lack of understanding of words and phrases. Thus a child was overheard to give this version of the oath of allegiance to the flag: "I pledge a legion to the flag and to the Republic of Richard Sands; one nation and a vegetable with liberty and justice to all." Another sang: "Long train run over us (Long to reign over us)"; and another patriotically intoned: "I love thy rots and chills (rocks and rills)." After a moment's hesitation on a line in "The Night Before Christmas," a child came forth with: "I rushed to the window and vomited (threw up) the sash." One youngster for several years quite contentedly sang, "The grandpas we watched were so gallantly screaming." For a long time a boy wondered where he might find the holes in a holy church.

Faulty perception of a word may lead to confusion, as in the case of the child who defined a pioneer as "one who moves father (farther) west." At two years, a boy at table folded his hands and assumed a devotional attitude when his mother asked him whether he would like some pears ("pears" sounded the same as the word he used for "prayers").

Even a written symbol may be puzzling because of its associations, as in the case of the child who answered during class recitation that the abbreviation of Illinois is "Sick," and another who reported that "Copra is a dried snake." In a study referred to earlier in this chapter, a child decorously tried to avoid the use of what he regarded as a slang term and reported that a baby goat is called a "child"; when questioned further, he said he knew some people called it a "kid."

Children's Information and Concepts

As one might expect, all studies show gains in children's information from year to year and from grade to grade. However, the information that children possess, the extent to which they grasp the concepts that are involved in their lessons at school, in what they meet through the newspaper, the radio, adult conversation, and the

like, tends to be quite spotty. Also, in connection with many topics children may possess a great deal of seeming information and yet may lack any real understanding. They may know the words by which to give the right answers without knowing the meanings of the words.

Children's knowledge and understanding are influenced profoundly by a factor which we might call "seasoning." In many areas it appears that in order to grasp certain meanings it is necessary for the child to have an accumulation of impressions and experiences distributed over a period of development as distinguished from lessons or impressions concentrated within a limited period of time. It has been found that impressions concentrated within a short period of time, even when quite dramatic and charged with emotion, are not likely to produce the same grasp of the subject as a child will obtain through a gradual accumulation of impressions and information over a longer period of time.

Findings in two studies dealing with children's information in certain limited areas are shown in Tables XXVI and XXVII. Table XXVI represents 100 children about to enter the first grade of school (Probst, 1931); they ranged in age from five years and four months to six years, and they were carefully selected to represent a cross-section of the population in the city where the study was made. It is interesting to note that certain items registered on the minds of children while many other items that were available for them to overhear or to see seemed to have made little impression.

A large percentage of the children knew the names of certain comic-strip characters. On the other hand, they had formed no impressions about certain public characters that were prominent in the news. The study was made during the heat of the presidential campaign in the fall of 1928, but not a single child recognized the name of one of the major candidates (Herbert Hoover) and only one child recognized the name of the other (Alfred E. Smith). Although this campaign must have aroused a good deal of interest among the children's elders, it apparently had no significance to children near beginning school age. The mere fact of being exposed to a topic that is receiving a good deal of attention from adults does not mean that children are going to form clear impressions or ac-

TABLE XXVI

SELECTED RESULTS OF INFORMATION TEST ADMINISTERED TO 100 CHILDREN, AGED 5 YEARS AND 4 MONTHS TO 6 YEARS[5]

(The values show the percentage of children who answered each question correctly. Some of the items and questions have been abbreviated in the present table.)

Test Items	*Percentage of Children Who Answered Correctly*
Local Points of Interest:	
Tell me the name of a Minneapolis newspaper	85
What is the name of a lake in Minneapolis?	27
What is the Mississippi?	78
What is Hennepin Avenue?	52
What is the Great Northern?	39
What is WCCO? (local radio station)	56
Time and Number:	
How many pennies in a dime?	22
What time of year do flowers grow outdoors?	99
What time of year is the weather cold?	92
How many eggs in half a dozen?	12
What day comes after Sunday?	75
What time or what o'clock is it at noon?	30
How many pennies in a nickel?	37
Current Topics and History:	
Who is Andy Gump?	74
What did Lindberg do?	87
Who was the first President?	55
Who is Dempsey?	63
Natural Phenomena:	
What shape is the sun?	85
Of what is snow made?	75
Where do you sometimes see a rainbow?	71
What makes it warm in the summertime?	91
Literature and Music:	
What colors are the keys on a piano?	84
Whom was Red Riding Hood going to see?	58
What did Cinderella lose at the ball?	38
On what part of the violin do you play?	46
Who was Hiawatha?	7

[5] Adapted from C. A. Probst, "A General Information Test for Kindergarten Children," *Child Development* (1931), 2:81-95. Reproduced, in much abridged form, by permission. The original tables report separate scores for boys and girls and for different occupational groups. For an earlier study of children's information, see Hall (1891).

TABLE XXVI (*Continued*)

Test Items	*Percentage of Children Who Answered Correctly*
Animals, Birds, and Insects:	
How many legs has a horse?	100
What does a cat scratch with?	97
From what are little chickens hatched?	63
What do bees make that we eat?	59
A baby dog is called a puppy; what is a baby cow called?	26
What do we call a butterfly before it becomes a butterfly?	19
Plants and Flowers:	
What do apples grow on?	97
What color are buttercups?	30
What color is wheat when it is ripe?	35
How many stones in a peach?	72
What do we call the part of the plant underground?	32
What do we eat that grows on vines?	29
Occupations and Industries:	
Who makes money by cutting hair?	96
To whose office do we go to get a tooth pulled?	95
What does a plumber do?	60
What is butter made from?	40
What is a shoe made of?	79
Where does coal come from?	32
Simple Mechanics:	
What do you use to put a screw into wood?	75
What do you see on the ground that trains run on?	98
What is the brake on an automobile for?	55
How are trees made into boards?	19
What is a thermometer for?	50
Games and Amusements:	
How do you play leapfrog?	21
What do people fish with?	96
What must you not do in tin-tin?	1
On what do people play hockey in the winter time?	60
In what game do you have a king-row?	10

quire information or learning relating to that topic. This point will be elaborated further in the discussion of the information and understanding about war exhibited by children at different levels while World War II was in progress.

The child's store of information is influenced not only by his ability to grasp meanings, but also by his firsthand opportunities for

observation and learning. In the study by Probst (1931) all the children knew what is used to cut cloth, but only 25 per cent of the children knew from what animal we get bacon. It is probable that this percentage would have been larger if this question had been asked of farm children who had had experience with the home butchering and processing of pigs.

The replies given by the children in this study when they did not know the correct answer to an item frequently were quite interesting. One boy could not give the name of any newspaper, but he gave a vivid description of a recent sensational murder, ending with the confident assertion: "That's the paper we take." "Clang" (sound) associations appeared in some answers, such as a carpenter fixes carpet sweepers or repairs cars; Energine is put in the radiator of cars; the Great Northern is the North Star; butter is made from buttermilk or butterflies make it; plants, seeds, and flowers are manufactured in the Ford plant; a plumber plumbs, pulls out plums, or sells plumbers; beans grow in gardens but bees make them. The effect of juvenile literature appeared in answers, such as "Clouds are made of animals"—the result of hearing a verse in which children see animals in the clouds, and "Butter is made from tigers" after *Little Black Sambo*. The source of many incorrect answers was somewhat obscure: One child, for example, asserted that a man who raises corn or wheat is called a "bachelor."

A further brief sampling of children's information concerning certain topics is shown in Table XXVII. This table is based upon results obtained by the writer in a study of about 500 children, aged eight to twelve years, most of whom were pupils in public schools in New York City. The younger children were interviewed; the older ones wrote their answers on individual test blanks.

On many of the items in Table XXVII the percentage of children who answered correctly would no doubt be considerably lower if guesses were eliminated. On some items, the percentage of correct answers is not much larger than could be expected of chance.

Among other things, it can be noted that relatively few children recognized the names of senators of their own state (even though

TABLE XXVII

PERCENTAGE OF CHILDREN IN GREATER NEW YORK CHOOSING THE CORRECT ALTERNATIVE ANSWER OR SUPPLYING THE CORRECT ANSWER TO VARIOUS ITEMS OF AN INFORMATION TEST

(Abridged and adapted from an unpublished study by the writer.)

Test Item	*Percentage of Children Giving Correct Answer*				
	Aged 8	*Aged 9*	*Aged 10*	*Aged 11*	*Aged 12*[a]
The sun rises in the: (*a*) east; (*b*) north; (*c*) west; (*d*) south	54	51	63	66	71
The moon sets in the: (*a*) east; (*b*) north; (*c*) west; (*d*) south	29	40	35	50	49
Up the Hudson River is: (*a*) east; (*b*) north; (*c*) west; (*d*) south	29	50	59	54	65
To the Rocky Mountains is: (*a*) east; (*b*) north; (*c*) west; (*d*) south	10	34	53	59	70
A boy walks a mile in about: (*a*) 1 hour; (*b*) 2 hours; (*c*) 25 minutes; (*d*) 5 minutes	27	44	58	52	47
A soldier can march in a day about: (*a*) 5 miles; (*b*) 100 miles; (*c*) 200 miles; (*d*) 30 miles	42	53	60	64	52
A ton of coal would: (*a*) fill this classroom; (*b*) almost fill this classroom; (*c*) not nearly fill this classroom	22	36	55	54	61
Which is bigger, a corn plant or a wheat plant?	54	58	66	77	77
Which is bigger, a tiger or a cow?	67	72	73	78	79
Which is bigger, a duck or a goose?	92	84	91	89	79
Which of the following is known as: (*a*) a President; (*b*) an actor; (*c*) a prizefighter; (*d*) a Senator:					
Copeland?	8	10	25	29	40
Wagner?	8	18	25	32	37
Coolidge?	37	38	46	54	58
Hoover?	45	66	76	84	95
Roosevelt?	93	97	96	99	100
Jack Dempsey?	62	65	82	82	86
Joe Louis?	79	92	96	98	95
Clark Gable?	87	96	98	98	100
From what animal do we get:					
Caviar?	6	7	9	9	6
Venison?	14	18	19	31	—
Mutton?	6	12	30	45	39
Bacon?	41	51	67	63	65
Beef?	48	48	62	74	78
Pork?	32	65	84	92	91

TABLE XXVII (*Continued*)

Test Item	*Percentage of Children Giving Correct Answer*				
	Aged 8	*Aged 9*	*Aged 10*	*Aged 11*	*Aged 12*[a]
Does a mother ..... have milk for her baby?[b]					
Elephant?	18	16	23	18	20
Wolf?	19	19	28	32	20
Goat?	69	81	90	91	93
Do the following grow: (*a*) on vines; (*b*) in the ground; (*c*) on trees; (*d*) on bushes:					
Peanuts?	20	39	29	36	33
Watermelons?	10	17	45	48	45
Carrots?	65	80	73	91	93
Oranges?	87	86	95	91	91
Apples?	98	96	99	99	98
Potatoes?	78	90	92	95	98
Which of the following comes from: (*a*) an animal; (*b*) a mine; (*c*) a plant; (*d*) the air:					
Linen?	29	50	69	68	83
Salt?	30	44	74	82	85
Sugar?	44	58	75	82	80
Cotton?	42	75	87	90	92
Leather?	63	68	82	92	80
Coal?	64	82	94	96	92
Wool?	89	93	95	93	94
Meat?	92	100	91	99	100

[a] The twelve-year olds were not as representative as the younger children, since they included no pupil above the sixth grade.

[b] Introductory item: A mother cow has milk for her baby, but a mother hen does not. Does a mother ..... have milk for her baby?

both of them were prominently in the newspapers at the time); that relatively few were well informed concerning points of the compass (some children were quite ready with the information that Columbus had sailed *west* when he discovered America and that Byrd went to the *South* Pole, but seemed to have no notion at all as to the meaning of directions when translated into terms of local geography). A large percentage of children believed that only one animal, the cow, has milk for its young, although some also included the goat.

Certain comparisons, not reproduced in the table, show large dif-

ferences between brighter and duller children. In one public school, the children in two bright classes were correct on 67 per cent of the questions concerning the points of the compass, as compared with a score of only 28 per cent in the case of older children in four dull classes. The difference between the bright and dull children was not so large, however, in the case of questions which they could not so readily answer on the basis of everyday observation or experience (such as the questions as to where peanuts grow and how far a man can walk in a day).

Frequently in the course of this study, it was noted—as has been noted by other investigators—that a child's answer to a question may not at all represent what the child actually thinks. He may give an answer with tongue in cheek, or bluff, or give the first answer that comes to mind, even though it is inconsistent with earlier replies, rather than frankly say he doesn't know. An unwary investigator of children's thought processes might easily be misled and, after collecting a number of answers of this sort, reach erroneous conclusions concerning the naiveté of children's thinking. A child may appear to be quite uninformed and may seemingly be lacking both in logic and consistency when approached with adult problems, and yet be quite realistic and hard-headed in dealing with matters of concern in his own world.

In the present study, among other tongue-in-cheek guesses, were the answers that bacon comes from a tiger (or a zebra), because both are striped. A child may even go to some lengths in maintaining a position when it appears that he actually is in doubt. Thus, a ten-year-old boy answered that only cows have milk for their young. When asked how a puppy gets its food, he answered that since a puppy must have milk you have to have a cow. To the question, "What about a baby horse?" he again answered, "You have to have a cow"; and the same to, "What about a baby camel?" By this time, he seemed to feel that he had got into difficulties, so when asked, "What about a baby elephant?" he replied, "Oh, let him eat hay!"

It should be emphasized that a child may possess vast stores of information that are meaningful and useful to him in his everyday

life, even though he may be lacking in information on many items of knowledge that adults take more or less for granted.

Children's understanding of academic terms and concepts. It usually is quite difficult for an adult to approach a topic from a child's point of view and to fathom how much or how little the child actually understands. Several factors contribute to this difficulty. For one thing, a child's grasp of a topic, term, or idea usually involves partial knowledge rather than complete knowledge or complete ignorance, and so he may use words in proper context even though he may not fully understand their meanings. The same child may be well informed along some lines and be quite lacking in understanding on other matters. Again, even though they are similar in intelligence and academic status, children may vary considerably in the degree of their understanding of a specific subject. Also, children often are quite cagey about revealing their lack of understanding, and sometimes it is only by virtue of an inadvertent remark that a child betrays his ignorance.

A failure on the part of adults to appreciate a child's viewpoint or lack of understanding can often be observed in connection with the teaching of the social studies in the elementary grades. In recent years, many schools have given much emphasis to the social studies by way of consideration of such topics as conservation, technological developments, monopoly, government control, problems of production and consumption, and democratic as against other forms of government. What often seems to happen is that these topics are treated in a manner that is just as unrealistic, from the point of view of the child's interest and understanding, as were some of the old-fashioned drills in history and grammar.

Often it seems that children are called upon to use a number of terms and ideas in large relationships when they have little understanding of the underlying meanings of the individual terms and ideas. Illustrations of this can be seen in a study by Scott and Myers (1923). Children were first asked, for example, to give an example under a certain category (e.g., give the name of a colony, of an explorer, and so on). Many children were able to name two explorers or to give the names of colonies but then were unable to make a

clear statement as to what *is* an explorer or a colony. A child's difficulty with such questions may not be due so much to a lack of recognition of the meaning as to an inability to find the right words to express the meaning, but this hiatus is interesting nonetheless.[6] It should be recognized, of course, that some vagueness on the child's part as he studies a given subject is unavoidable, for it is only by using terms and concepts in various contexts and relationships that they come to be defined and to have more and more meaning. Although this truth is recognized, it still may be said that, where there is a choice, it would be better to approach a topic by way of conditions known to the child in his own experience than by way of abstract and remote terms or propositions.[7]

Other instructive findings concerning children's knowledge of terms and concepts used in the social studies have been presented by Kelley and Krey (1934).

Difficulty in understanding economic and political concepts is not, of course, limited to children of elementary-school age. At the high school and the freshman and sophomore college levels, many students have difficulty in dealing with a number of economic concepts.

Understanding of cartoons. In a study by Shaffer (1930), ten newspaper cartoons were presented to approximately 150 children in each grade from four through twelve, and the children were asked to write an answer to the question, "What does this cartoon mean?" It was noted that a large proportion of responses in grades four and five were in the nature of a description of the cartoon, without interpretation. At the later grade levels interpretations which recognized the symbolic nature of the picture predominated. There was an increase in the merit of the interpretations from grade four through grade twelve, although the increase was not entirely uniform.

The findings indicate that the average pupil at the junior high school level and beyond is able to interpret cartoons abstractly even though such cartoons are presented without contextual material,

[6] For a review of several studies of children's understanding of terms and concepts involved in school subjects, see Jensen (1939).

[7] For example, a child may fail for a long time to see any relationship between the taxes he reads about in his study of history and the extra penny he pays as a sales tax in making a small purchase.

discussion, or previous training. It was noted that the ability to give an abstract as distinguished from a concrete interpretation of cartoons was more closely associated with mental maturity than with other factors. The average age at which abstract interpretations occurred was 12.83.

Concepts of time, space, and magnitude. Through concrete experience in the day's routine, a child has an opportunity gradually to form a notion as to what is meant by a minute or a day, although much confusion often prevails, partly because of vagueness in adult usage (such as the indefinite "Just a minute"). As is the case with adults, a child's experience of the passage of time will be influenced by what happens to fill the time; time spent in waiting is long, and a twenty-minute lesson may seem almost interminable, whereas a similar recess period spent in play may seem short.

In a study of the time concepts of young children it was found that children referred to the present before they referred to the future, and that they dealt with the future before they expressed ideas involving the past. The word "today" was used at about twenty-four months, "tomorrow" at thirty months, and "yesterday" at thirty-six months (Ames, 1946).

Children's ideas of historical time, in terms of decades, centuries, or epochs are likely to be quite hazy until they are well along in school. Youngsters in high school have difficulty in grasping duration and sequence in connection with historical events and movements. In a study by Oakden and Sturt (1922) children's ideas of degrees of antiquity were measured by such means as having them arrange the names of well-known historical personages in order of their remoteness in the past and having them respond to pictures denoting customs and costumes representing different historical periods. They found that concepts of historical time were rather hazy until about the age of eleven years. Bradley (1947) also found that the capacity to understand conventional time-schemes is relatively late in its development.

The foregoing statements no doubt must be accepted with some reservation, for some children will acquire ideas of time consider-

ably earlier than others; likewise, a given child may have a good grasp on some time relations and not on others.

Undoubtedly, much that a child is exposed to in history lessons, or in units on Ancient Egypt or on the Early American Indian (not to mention units in geology dealing with the age of the earth!),[8] is lost upon him as far as time relations are concerned.

Children's concepts and understanding in relation to amount of instruction. Studies such as the foregoing indicate that children's information tends to be spotty in many areas and that a large proportion of children at about junior high school age and below show relatively little understanding of many topics relative to historical or contemporary social, economic, and political affairs, such as frequently are emphasized in textbooks. It appears that in many schools what the educators had hoped to achieve and had expected children to understand through the social studies has been radically out of line with reality. It appears that a large proportion of children have either failed to understand or have acquired no more than a superficial familiarity with certain words.

We might ask: What is the reason? Have expectations been too high? Have methods of teaching been poor? Available evidence does not give a complete answer to these questions. However, there is evidence to indicate that the reason for the discrepancy between what has been expected and what children have achieved resides both in a failure to scale what is taught to the mental maturity of the child and in a failure to present what is being taught in such a manner that the child can learn it and interpret it in the light of his own everyday experience.

First a word with respect to scaling to maturity level. Findings from various studies indicate that children's information and understanding concerning contemporary and historical, social, economic,

[8] In a fifth-grade class observed by Professor Gerald Craig, the children were discussing the Appalachian Mountains, and the teacher took this opportunity to question them on what they had retained from previous discussions of the age of the earth. The question, "How old do you think those mountains are?" stumped the group, until a hardy youngster answered, "I think those mountains came there at about the same time as the Pilgrim Fathers."

and political affairs is not dependent simply upon the amount that is taught, or the method of teaching, or the concentrated or dramatic manner in which information is presented, for what is grasped depends in part upon a process of maturing and upon experiences associated with the fact of growing older.

Wartime should, if anything, provide more of a stimulus to learning about certain current events than prevails in times of peace. Actually, findings from a number of studies indicate that children's information concerning wartime happenings are substantially of a sort that might have been predicted from studies of children's information and understanding with respect to peacetime affairs.

In one study, children at beginning elementary-school age were found to respond to wartime happenings largely in specific terms (Kimmins, 1915-1916). In discussing an air raid, for example, they are likely to deal with happenings and the specific local effects, much as their discussions during peace deal with the concrete and near at home. In keeping with this, younger children were found in one study to respond to the war situations on a perceptual rather than a conceptual level (Bender and Frosch, 1942). With advanced age, on the other hand, children showed increased understanding of larger military and social implications. In another study (Preston, 1942) conducted with children in the New York City area in 1940, it was found that 62 per cent of children aged nine and ten did not know that the British Navy was larger than the German Navy, and 52 per cent did not know that the German Air Force was stronger—at the time—than the British Air Force. Both of these facts were crucial to an understanding of the war situation and both facts were constantly being stressed in news and comments about the progress of the war. At ages thirteen and fourteen, 35 per cent of the children did not know that the German Air Force was the stronger, and 18 per cent did not know that the British Navy was the stronger.

Various other lines of evidence indicate that the understanding of certain concepts depends not upon concentrated study or vivid experiences alone but upon impressions that accumulate in the process of becoming older. One study in this area (by Pistor, 1940) deals with the development of time concepts. A time-concept test was

given to two groups of sixth-grade pupils, aged ten, eleven, and twelve years. One group had previously received, in the fourth and fifth grades, systematic training in both history and geography and during the sixth grade the concept of historical time was taught to them in quite an intensive fashion. The children of the other group had received training primarily in geography alone, with only incidental attention to historical matters.

When tested early in the seventh grade, both groups showed a substantial gain over the scores earned before they began their work in the sixth grade. However, the average scores of the two groups of children were practically equal. Special emphasis on time concepts in one case, and absence of special attention to such concepts in the other, had not produced any significant differences.

In keeping with the foregoing are other findings which indicate that the amount of understanding and information children have with respect to matters commonly considered in the social studies at school is not directly related to the amount of time devoted to such topics in the school program (Eaton, 1944). On the basis of present evidence it seems that a good deal of time and effort is being wasted in trying in the early grades to teach concepts which should involve not direct teaching alone but the opportunity for learning that is incidental to the child's everyday living over an extended period of time.

It is also likely that many concepts which now are vague and confused because they have been taught in terms that are abstract and remote from the child's experience might become meaningful if the child were taught in such a way that he could identify himself with the issues being considered.

Emotional and Intellectual Elements in Children's Thinking

As indicated earlier, thinking usually involves factors other than pure intellectual activity. The process and the outcome of thinking will not be influenced only by objective facts that are in keeping with reality and that can be communicated to others, for a person

may pursue a line of thought and reach a set of conclusions that are influenced primarily by his desires, prejudices, or fears.

As Murphy (1945) has stated, "the towering genius of the great scientist often lapses into childish babbling as he turns to problems in which his personal desires give structure to his thought."

Several studies have dealt with the fact that children have a tendency (along with adults) to be influenced in their thinking by their emotions and also by past habits of thought. Northway (1936) found, for example, that when children were called upon to recall stories they had been told they tended to retell the stories in terms of familiar situations. The more strange and unfamiliar the material is, the more a child, according to Northway's observations, is likely to invent details that fit in with what he already knows. A somewhat similar tendency was observed in studies by Hildreth (1941, 1944), who found that when children were asked to reproduce designs that had been shown to them they tended to render unfamiliar and meaningless designs in a way that was in keeping with the familiar forms and proportions.

The effect of attitudes children already are committed to has been studied by McKillop (1952), who presented children with biased but more or less plausible discussions dealing with racial relationships and the subject of communism. According to McKillop, what a person perceives in a written account is likely to reflect the attitudes he has. Also, materials that are in keeping with an attitude a person already has are likely to be more easily learned or retained than materials that are opposed to his attitudes. The attitudes that already prevail show through more prominently when people are confronted with an ambiguous passage from which they can infer or into which they can inject their own bias. In McKillop's study, for example, when passages had been read and questions were so worded that there was no right answer but an opportunity to express a judgment, the students' attitudes were revealed more clearly than when the information was quite specific and the questions were quite definite.

The tendency to perceive and to remember and to judge in ways that are in keeping with one's desires or in a way that in a sense shields one from one's fears may go so far, of course, that a person

completely perverts and distorts. One of the more extreme manifestations of this occurs when a person claims to possess characteristics that are almost the exact opposite of what others regard to be his true character, and gives false reasons or motives for his opinions and conduct.[9]

Gaps in the Process of Thinking and Feeling

Elsewhere in this book there is a discussion of the view that children have capacity for taking stock of their own inner experiences to a greater extent than commonly has been assumed. But with this it is necessary also to recognize that there are many limitations and gaps in a child's view of himself. In an earlier section we have shown, for example, that children's earliest memories which represent, in a sense, their intellectual awareness of their early existence seldom cover the first two or three years of life. This means almost automatically that a person is, at least to a degree, out of touch with important features of his early life. It does not mean that he is completely out of touch however, for if experiences of the past influence his present way of life then, to that degree, the past lives in the present and the effects of the past can still be examined, even though the particular events which produced these effects cannot be remembered or reviewed.

Apart from this lag in the process of remembering, according to some writers, there is a dislocation in the larger sphere of intellectual and emotional development. It has been assumed by some writers that emotion of a rather blind character is the precursor of intellectual life. According to this view, the child feels before he thinks; his thinking is an outgrowth of his feeling, and as such, it is a latecomer in the process of mental development. Another version of this is that the process of thinking, in the beginning of life, is a captive: The intellect is not free, for thought serves desire before it serves truth. Actually, there is a good deal of disagreement among investigators on the question as to the stage of development at which chil-

[9] Numerous examples of such distortion and falsification in older persons have been compiled by Frenkel-Brunswik (1939).

dren are able to think objectively, logically, and in terms of cause and effect. Apart from this, not much experimental work has been done to study children's ability to take stock of their own feelings and the feelings of others. Findings from some studies, however, including studies cited in an earlier chapter and also from the experiences people have in connection with therapy with young children, suggest at least to the writer the likelihood that children are able to begin to give heed to their attitudes and to experience awareness of their own feelings and the moods and feelings of others at an early age. The writer would conjecture that some children are capable of this almost from the time they are able to talk, but this is a field where it is possible only to conjecture since the data are so limited.[10]

However, even if we assume that children have a capacity for perception of their own feelings at a fairly early age the fact also remains that children, as we now find them, do not seem to make very much use of this capacity. There is, to say the least, a distinct lag in self-inquiry in many children. It does not seem to occur to many children that their own inner state might be an appropriate subject for them to be curious about or to find out about. It has been observed, for example (Jersild and Tasch 1949), that it does not occur to very many children until about the time of adolescence to express an interest in finding out about themselves. When asked what they would like to know about or study about or find out about, children of early school age do not frequently mention that they would like to know more about their own thoughts and desires and feelings. Even at the high school level an expression of interest in knowledge about self is not likely to appear unless the school has encouraged an interest in self-understanding. Many children, for example, will freely confide their fears in a person whom they trust, and yet it will occur to very few of them to express an interest in examining their fears not from

[10] An example of a child's awareness of his feelings was offered by a boy about four years old who often came home from kindergarten in the afternoon tired and somewhat irritable. Once when he came home he announced, "I am in a bad moove (mood). Don't talk to me." In this he seemed to show a recognition of his own feelings and some understanding of the fact that if he lost his temper it probably would at least be due in part to the fact that he already was out of sorts.

the point of view of the nature of the objective danger but from the point of view of inquiry into what it is in them that makes them so subject to fear. In other words, many children are troubled by conditions within themselves without having the idea that their own feelings might be an object of study much the same as the geography of South America or the mechanics of a clock might be an object of study.

As we have noted in an earlier chapter children are very much preoccupied with themselves in the sense that they give far more emphasis to "I" than to "he" or "she" or "you." This tendency to be preoccupied with his personal affairs and concerns continues in a child even though, as he grows older, he becomes more capable of appreciating the point of view and the thoughts and feelings of others. "I-mindedness" is not limited, of course, to children, for it holds true also in the behavior of adults. But this tendency to be involved in his own personal concerns is not accompanied, however, by a corresponding tendency to be introspective or to look at himself objectively. In thinking about their own concerns children do not as a rule reveal that they have much insight into their own characteristics, powers, and limitations. This is illustrated by children's wishes. In a study of the wishes of children of elementary-school age cited above it was found that children wished mainly for accomplished objective facts, rather than for the wisdom and strength within themselves which would enable them to win the things they desired. The child is likely to express a wish for achievement by asking for a good grade in school rather than by asking for the ability within himself to earn good marks. Few children in the study wished for higher mental ability, and among those who did, the wish was expressed as frequently by children who already had superior intelligence as by children who were below average. Wishes dealing with improvement in personal ability, strength, size, or appearance constituted only about 11 per cent of the children's wishes (even with the liberal inclusion of wishes for specific accomplishments, such as the ability to ride horseback or to play the piano).

In answering questions as to what changes they would like in themselves if they could be different the children likewise thought

mainly in terms of the external environment rather than of factors within themselves that would give them power to cope with the environment. Only about a third of the children in the study saw in this question an opportunity to wish for an improvement in their personal qualifications by asking for greater intelligence, strength, and ability.

When thus phrasing their wishes in terms of accomplished facts, as though to be given from without, it is likely that children are using a habit of thinking rather than revealing a limitation in their capacity for learning to take stock of themselves. At any rate, as will be noted in Chapter Nineteen, a great many children of elementary-school age and beyond will think of their own characteristics and inner resources when specifically asked to tell what they like or dislike about themselves. However, it still is interesting that such thought habits prevail. In a vast amount of the instruction and indoctrination children receive the emphasis is placed on something imposed from without and on values set by external standards. Much happens at school, for example, which makes a child think of his intellectual qualities in terms of the grades he gets rather than in terms of the experiences he has in struggling with problems and satisfying his curiosity.

One characteristic that has been regarded as a mark of intellectual maturity is a capacity for self-appraisal, at least to the extent that a person has some awareness of his limitations and his strength, some capacity to formulate his goals and aspirations, and a certain amount of self-understanding with respect to his motives. The person who is able to achieve a certain degree of insight into himself should be in a better position to cope with his frustrations and his fears. He should be more immune to the emotional turmoil that arises from unresolved conflicts than the person who is unaware.

When children, on a large scale, seem to be rather naive with regard to themselves and rather disinclined to take a look at themselves we cannot assume that this lag in self-inquiry means they do not have a capacity for self-inquiry. Very little has been done in our schools and very little seems to be done in most homes to encourage children to use and to develop their capacity for self-examination.

Indeed, many adults go to great lengths to avoid the challenge of facing themselves and the opportunity to look beneath the surface reasons for their likes, dislikes, strivings, and fears. If a child at home says he is afraid or says "I hate Jimmy (a playmate)" he is more likely to be told that there is nothing to be afraid of or to be told not to hate people than to be subtly encouraged to discover and to reveal more concerning the nature of his fear or to understand what there is in him that makes him hate Jimmy or what there is about Jimmy that makes him so hateful. In school work, similarly, a vast amount of attention is paid to the external dimensions of things. Even so intimately human a subject as history is often taught as a kind of chronology and as a record of impersonal events rather than as a record of human struggles, hopes, antipathies, loyalties, follies, and fears. Similarly, current events are likewise usually not presented in a manner that would help the child to see some of his own feelings and struggles in the characters that are involved in the events that are reported.

Actually, there is no part of the academic curriculum which could not in one way or another help a child to grow in understanding of himself. In dealings with pupils, even so potent a poison as failure is distributed on a vast scale as though it were simply an objective fact that many children must fail and must be exposed to situations in which it is known in advance that many will fail. Potentially, every subject and every aspect of experience at school might be used to help the youngester to discover himself, to explore the reaches and limitations of his abilities, to uncover his resources and talents, and to clarify his conception of himself and his perception of the feelings that come into play in his own experience and in the conduct of others.

CHAPTER FIFTEEN

Children's Make-Believe, Dreams, and Other Imaginative Activities

Make-believe, daydreams, and other imaginative activities occupy an important place in the child's mental life. Through his imagination the child is able to transcend the boundaries of time and space. He can deal with happenings, persons, and things that lie beyond his ordinary reach, and he can perform feats beyond the limits of his actual strength.

A child's imaginative activities also play an important role in his emotional life. Through his imagination the child can give play to his wants and desires, his hopes and fears, without facing all the risks and hardships of reality. Imaginative behavior also serves as an important vehicle for the child's social development, for much of his play with other children takes place in make-believe settings. There is interaction even between a child's imaginative activity and his motor development: Many important motor skills are acquired or are practiced in connection with enterprises that have a high imaginative content, such as doll play and housekeeping, and make-believe often supplies the plot or purpose in settings in which the child practices such motor activities as climbing, swinging, or riding a coaster or a bicycle.

Early Manifestations

Just when a child becomes able to imagine is difficult to tell, but it seems that this development appears at least as early as the ability to talk. Some children are capable of quite complicated imaginative activity before they are able to talk.

An example of such early imaginative behavior was shown by child of eleven months who was observed by the author. This hild in the course of her creepings about the house had discovered he garbage pail and had also discovered that she was not supposed o explore its contents. Once she started to creep across the kitchen loor toward the pail while her mother was watching. When the nother gave a warning sound the child stopped for a moment, then rept a short distance, then looked up at her mother, laughing eartily. Again she made a false start and again she looked up, laughng merrily. She obviously was getting great sport out of this game f *pretending* to go to the garbage pail while the mother looked on. This episode occurred several months in advance of the time when his child combined two or more words in her speech.

Other early signs of imaginative activities are shown by some hildren when they imitate, in pantomime, activities of older perons. At ten months, for example, a child was seen to go through he motions of "telephoning" with a toy telephone belonging to n older sister. Similarly, a child at about the age of a year may go hrough such motions as "feeding" a doll, putting on Daddy's hat, nd dragging his brief case toward the door.

Manifestations of make-believe become more obvious and frequent nce a child has learned to talk. Comments of an imaginative sort ften appear in children's language when they are at play with one nother. Findings at the preschool level indicate that imaginative lay activity increases in the age range of about two to four years. n one study in which records were made of children's language it vas found that 1.5 per cent of children's remarks at twenty-four to wenty-nine months of age were imaginative in character; at forty-wo to forty-seven months the percentage of imaginative remarks vas 8.7 (Burnham, 1940). In another study, in which language as vell as overt behavior was recorded, there was a sixfold increase in requency of imaginative episodes from two and a half years to four ears (Markey, 1935).

Apart from changes with age in amount of make-believe language nd activity, there are some changes also in the themes with which hildren deal. In the study by Markey it was found that a large pro-

portion of the imaginative activity of children under the age of thre fell into three large categories including (1) activity involving pe sonification, such as talking to dogs and talking to inanimate object (2) activity involving make-believe use of materials, such as callin a slide a train, drinking out of an empty cup; and (3) participatio in make-believe situations, such as in a game of putting out a fi or taking a bath. At the age of three years and over, make-believ uses of materials were among the most typical imaginative acti ities; but after the age of three years and six months, make-believ situations, making and naming constructions with blocks, crayon and the like, and dramatic play became quite common. Markey als found that younger children most frequently engage in imaginativ activity revolving around specific materials which are actually ther before them and which they can handle, whereas the older preschoo child frequently undertakes complicated make-believe that involve relations and themes.

Functions of Make-Believe

As indicated above, make-believe activities serve many function in the child's mental life. By virtue of being able to transcend hi actual limitations and to go beyond the restrictions imposed b reality, the child is able to deal with the world in a freer manner He is able to reason on a lower level of concentration. He is no held to all the rules of logic and consistency. He can combine frag ments of ideas. A wagon with which he plays is now a car, now a train, now a ship, now a lunch counter in a restaurant. He car manipulate ideas which he only partly grasps. He may, for example know the names of certain cities where relatives live or through which his parents have recently traveled; then, in connection with imaginary boat play he may visit these cities, going by boat from one city that is located on a seacoast to another city that lies far inland. A trip between two cities 500 miles apart may require less time than a trip between adjacent towns. Moreover, even though the voyage is by water, there is nothing to prevent him from stepping off and making

little side trips on foot, for when he steps off the water accommodatingly becomes dry land.

Through his imagination the child is able to deal with situations and to solve problems that he could not so easily handle when dealing with reality. He can manipulate his environment with greater ease; he is able to solve problems without having to keep all relevant things in mind. Through make-believe the child is able to mold the world nearer to his heart's desire.

Make-believe enables the child not only to realize his wishes vicariously but also provides a means for him to cope with his fears. Frequently children will deal on an imaginative level with things that in reality they fear. An example of this appeared in the behavior of a two-and-a-half-year-old child who became afraid whenever she saw a dog on the street. At home she repeatedly went through a game in which she would get down on all fours, bark, growl, and head toward her mother saying, "I'm going to bite you." When she came close to her mother, she would say in a comforting tone, "I'm a good dog. I'm not going to bite you, Mama, I will kiss you." Then she would proceed to lick her mother's stockings with a great show of affection. It was as though she were acting the way she wished a feared dog would behave.

In the example above it was observed that after several episodes in which the child had played the part of a dangerous dog suddenly turned friendly the youngster took to using similar verbal expressions on the street. While holding her mother's hand, she would say about a dog very much in the same tone as she had used in her play, "Mama, he's a good dog. He doesn't bite me." She still stayed with her mother, but there was now much less manifestation of fear in the manner in which she held her mother's hand and in the manner in which she spoke than was the case when the fear of dogs was first observed.

Children are also sometimes able by way of make-believe to be rid of irritations, to remove or overcome conditions that annoy and thwart them in real life. The way they dispose of such problems may be rather drastic. In the study by Markey, cited above, children were

provided with small pieces of kitchen equipment and a "family" in the form of dolls and were encouraged to play a housekeeping game. One boy proceeded at once to lay hands on the dolls. He called them bad babies, put them on the toy stove, and said, "You've got to be dead. You've got to stay on there for three weeks." Then he proceeded imaginatively to break the house down and to beat the dolls, talking while he did so and calling attention to the burning of the bad babies in the imaginary fire. The school records of this child revealed that he was very jealous of a baby brother and, at home, had shown delight at the baby's squirming and crying when his nose was being cleaned, just as now, in the imaginary situation, he seemed to relish the thought of watching the wretched baby burn.

Another child, aged about three years, began to "make supper for the little girls"; she opened the icebox and said, "Dolly dear, we *always* leave the icebox door open." Here again the child's behavior was related to actual circumstances; the child's mother revealed that, to keep the youngster from raiding the icebox at home, it had finally become necessary to tie a heavy wire around it, and one night the mother had discovered the child trying unsuccessfully, while muttering angrily to herself, to open the icebox. The child's remark to the doll described a state of affairs that she wished might prevail at home.

Escape by way of the imagination from a situation which to the child was unpleasant appeared also in the case of a child of four and-a-half years who announced to her mother: "I'm inventing a new paint for the bathtub. It will take twelve years to dry, and you can't use the bathtub for twelve years."

Degrees of vividness. The usefulness of imaginary projects as a means of learning to cope with the real is enhanced by the fact that the imagined may be intensely vivid in the child's experience. An example of this appears in the behavior of a four-year-old child (observed by the writer) who had acquired a fear of a bogey man. She sometimes faced this fear on an imaginary level by prevailing on her two-year-old brother to play the role of a bogey man; she would put a white towel over his head and he would sit by as she called him a bogey man. As part of the game the four-year-old then would take

o her heels to escape from the bogey man. However, it was noted on several occasions that the fleeing which began in fancy ended in earnest—she seemed to become genuinely afraid of the bogey man whom she had created. One can imagine that there are many gradations between such a situation as this in which the imagined takes on the frightening aspects of reality and situations at the other extreme in which the imagined is regarded as fanciful in character and yet can provide a mild taste of the real thing.

Make-believe as a form of logic. Make-believe not only enables the child to avoid the necessity for complete rationality but it also provides him with a means of making things seem rational. Examples of the way in which make-believe enables the child to give a good reason or explanation appear when children are in the beginning stages of drawing. Frequently it appears that the thing a drawing is meant to represent is thought of after the drawing is completed. Certain lines and colors that had been put together without plan may slightly resemble a flower and so now the drawing is called a flower.

Moreover, the child may be able through make-believe to substitute one rationale for another. An example of this is supplied by a five-year-old girl who had visited her grandmother in the city and was inspired on her return home to make a colored drawing of her grandmother's apartment house. She first made a good representation of an eight-story apartment building. Then, in the process of putting a street into the drawing, she happened to run the lines of the street through the fourth floor so that the lower floors were buried under the street level. This apparently went counter to the original theory of the drawing and so, it being impossible to erase the crayoned street, the youngster changed the theory of her drawing. She shaded all the portion below the fourth-floor level. She added little insect-like creatures, both in the floors under the ground and above the ground. Then she proudly displayed the drawing and said that this was a drawing of the "home of the ant-killers." (The little insectlike creatures were "ants.") She now made it appear that she had intended from the beginning to have part of the building below the surface of the ground.

Some consequences of the ability to imagine. In addition to the foregoing accomplishments, an important feature of imaginative activity is the ability to anticipate an event before it actually occurs. The child becomes able to project himself into occurrences that are yet to transpire. This ability to anticipate the future, to borrow what is yet to be, not only augments the child's powers but also exposes him to difficulties. Just as he can savor future pleasure and success he also, in anticipation, can taste fear and trouble. The toddler may feel delight at the prospect of taking a walk when he sees his mother bring his wraps from the closet, but his delight may be diminished when similarly in anticipation he dreads a ride on the elevator which he fears. When he is in the park he may feel depressed when he sees that his mother is preparing to take him home, for now, still eager to taste the excitement of the outside world, he can anticipate the horrible prospect of having to go home just as earlier he anticipated the pleasant prospect of getting out of the place.

As a child becomes older, this ability to anticipate both the good and the ill appears in more complicated forms. One characteristic of the mental life of the older child is that it is lived with considerable reference to the future. The expectation of what lies in store may, for example, sustain some children through long periods when they practice the playing of a musical instrument, or try to perfect their ability to swim or to play ball or to dive or to ride a bicycle without touching the handle bars, or later to build a dam or to assemble materials for the building of a raft.

This capacity to work for deferred goals is, of course, prominent in the later high school years and at the college level when the student goes through years of preparation for entering a profession and accepts the academic chores that are assigned even though neither he nor any other reasonable person can see any value in some of his assignments in relation to the vocation for which he is preparing. To have expectations based on what is to happen in the future a person must be able to imagine. Unless a child can imagine he cannot know what it is to hope. As children grow older and approach adolescence their ability to hope for a future which

they can imagine adds, so to speak, a new and different world to the world in which they live. Through such imagining an older child may be able to endure more easily the hurt and unpleasantness he finds in the real world in which he resides. For example, a boy who is nearing his teens and who is unkindly treated or who for one reason or another feels that his lot is not a good one may, in his imagination, picture the time when he will be old enough and able enough to move out of his present environment and make his way in the world, and he may imagine himself in the process of fulfilling ambitions which become loftier and soar higher and higher as his present lot seems to him to be more and more bitter. Or, in a more benign mood, a child who is joyful and grateful in his relations with others may imagine himself involved in future tasks devoted to the welfare of others.

Functions of Make-Believe in Social Development

As indicated above, make-believe activity provides an important vehicle for the learning of social behavior. In a large proportion of instances in which two or more young children play together they are held together by a make-believe activity. Make-believe not only provides a basis for children of similar age level to play together but also makes it possible to supply themes that will hold children together at play even though they may be several years apart. Thus two sisters or brothers, an eight-year-old and a three-year-old, might play at a game of being parent and child, doctor and patient, captain and engineer on a boat, although there are few if any activities of a more prosaic character that would keep the two together (unless an adult entered into the activity with them). Make-believe is thus one of mother's greatest helpers.

Besides supplying the basis of activities that bring children together, make-believe activities provide a setting in which children are better able to tolerate and enjoy one another than would be true in a realistic setting. A six-year-old may be annoyed when in real life her two-year-old sister cries easily, or needs help with her clothes, or spills her food. Now, in a make-believe setting, in which she is

the mother and the two-year-old is the baby, the same six-year-old not only accepts but she may even encourage babyish behavior of this sort. Likewise, the younger child who resents the bossing of an older sibling may, in a make-believe role as a pupil or a baby, cheerfully obey orders and even accept punishment from the older sibling. In a make-believe setting with other children, a child often will accept restraints and deprivations which he would protest vigorously if they were imposed by a very well-liked adult. Thus, when told by an older child who is the "teacher" that he must sit very still, a young child may remain quiet for a relatively long time; and when at a "birthday party" he may be Spartanlike in waiting until all imaginary guests are served before he begins to eat.

Often, of course, reality intrudes upon such idyllic scenes, especially if one child or the other begins to take advantage or if the demands within the imaginary setting become too taxing. For example, a four- or five-year-old in a cops and robbers game with an older child will rebel if required to be "dead" for an unendurable period of time. Even so, it appears that it is often in a make-believe setting, in play with other children, that children for the first time achieve feats of self-restraint, patience, perseverance at a task, good manners, and the like, which adults constantly are trying to promote.

By way of the imagination children also are able to practice social techniques even though no one else is at hand. Thus a child who fancies himself wronged is able verbally to scold the absent wrongdoer just as the adult in a similar situation mutters under his breath against others. Likewise, a youngster can go through the motions of dressing, trying on various costumes, and assuming polite manners before an imaginary audience.

Other consequences of imaginative behavior. The fact that a child is able through his imagination to anticipate a future event adds greatly to undercurrents in his behavior that are difficult for others to understand. Sometimes when the child seems to be unduly unreasonable, or when he gives what appears to be an exaggerated emotional response, the reason may be that in his fancy he has built vivid expectations which now are thwarted. So, for example, a four-year-old who has looked forward to going on a shopping trip with

his mother may show extreme anger and disappointment when, for one reason or another, it becomes impossible for the mother to go on the shopping trip. In his fancy he may not only have made the trip several times but he may also have built elaborate plans and experiences around what he expected his mother to buy. The fact that the trip simply had to be postponed does not minimize the child's disappointment.

An older child may similarly react to deprivations in a manner that, from an adult point of view, seems quite unreasonable. An example of this appeared in the case of an eight-year-old boy who sometimes had been permitted to stay up late enough at night to listen to a certain exciting radio program. One evening the father announced that it would not be possible for the boy to listen that night, and the father gave what he thought was a good reason. But the boy became violently angry. He scolded and accused his father of rank injustice and made it seem that he was a victim of great unfairness and persecution. Later the father learned that the announcement that the boy could not listen did not simply mean that he would be deprived of the pleasure of following a program for fifteen minutes; instead it meant that what amounted to a little plan of life had been broken. All during the day the child had been pointing toward the program in his make-believe play. He had taken the part of one of the characters. He was counting on living with this character and with the other characters on the program that evening. He was counting on this listening experience as an especially enjoyable feature in a make-believe enterprise that could be continued after the program was over.

In this example the father happened to discover how much the deprivation meant, and thus was enabled better to understand the behavior of his child. No doubt situations analogous to this, many of them perhaps less violent in nature, are repeatedly occurring without being detected in the everyday lives of children.

As can be seen, the play of a child's imagination provides one clue among many to childhood behavior which frequently in the eyes of adults seems unreasonable and perverse. In both of the examples above the adults acted according to what to them were good and

sufficient reasons. The children, on their part, responded in terms of what to them were powerful and all-important reasons. In many situations, such as these, the issue does not involve the position of one who is right opposed to someone else who is wrong. Rather each may be right in the light of his own experience and wishes. Much friction, opposition, and suffering in the lives of individual persons and in society at large could be avoided if somehow people could better learn to understand that the solution of many problems cannot be attained simply by showing one party to a dispute that he is wrong. In many disputes both parties may be equally right or equally wrong, depending upon the viewpoint from which the dispute is considered. The issue then is not one of determining who is right or wrong but of discovering the most reasonable way of reconciling positions which clash because they are different.

Daydreams and Fantasies

Toward the end of the preschool period and throughout later years, more and more of a child's imaginary activities take the form of private fantasies and daydreams. These fantasies, like the earlier more openly expressed forms of make-believe, may variously serve as a means of riddance, escape, compensation, fulfillment of desire, vicarious adventure, and excitement, and they may provide a means for the exercise of many interests and ideas. In many of these daydreams, the child plays a dramatic and heroic role and has command of powers, abilities, privileges, and opportunities that normally lie beyond his reach. In many of these fantasies, the child projects himself into roles and scenes that are more remote from everyday happenings than the make-believe activities of an earlier age.

Daydreams of one sort or another are likely to continue throughout life. The themes involved and the extent to which the individual indulges may vary from time to time as different life situations arise, and at different times the daydream may range from the abandonment of sheer fancy to an ordered procession of ideas. Whatever may be the degree of unreality involved, such enterprises will be related to the individual's everyday problems and desires. Even though the

imaginings of an older child are not bound by the facts of experience, some of his make-believe will have more logical coherence than it had at an earlier age. In the process of achieving a semblance of plausibility and logic, an undertaking that begins as a fanciful daydream may end as a form of businesslike problem solving. Thus, an eight-year-old boy rides, in his fancies, jauntily over the Western range on a fine horse, ready for combat with horse thieves, coyotes, or Indians. As the plot unfolds, his activities become increasingly complex. He has a trusty rifle and a belt of ammunition at the start; but when he stops to camp, he needs materials for making a fire, cooking utensils, and what not, so he finds it is necessary to pretend that he had an extra pack horse with him from the beginning. As the tale goes on, he may find himself so burdened with equipment, horses, and other paraphernalia that the job of planning and ordering things in the daydream becomes somewhat arduous. This tendency for a daydream to bog down under its own weight as it calls for more and more ingenuity and "thinking" frequently occurs in adults and spoils what might otherwise have been a fine time.[1]

Imaginary Companions

An especially interesting form of imagery occurs when a child has what is called an "imaginary companion." [2] This phenomenon, if it appears at all in the life of an individual child, is likely to appear some time between the approximate ages of three and ten years, although the occurrence is more probable during the earlier than during the later years within this range. It is difficult to formulate a precise definition of what constitutes an imaginary companion since the difference between this phenomenon and an ordinary play of imagery apparently is a difference mainly in degree. The label "imaginary companion" is commonly applied to an imagined creature

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[1] A study by Griffiths (1934) deals in an illuminating way with the imaginative activities of children of preschool age. A book by Green (1923) discusses the make-believe activities of older children.

[2] For studies of imaginary companions see Hurlock and Burstein (1932) and Svendsen (1934).

or thing that is unusually vivid and that tends to have quite stable characteristics as long as it lasts.

Ames and Learned (1946) found that imaginary companions and related phenomena occur in nearly all children as a developmental phenomenon characteristic of the child from about two-and-one-half to four-and-one-half years and perhaps persisting secretly considerably past that age.

The character may be a person, an animal, or an object. In some cases it appears to be almost as vivid as an hallucination. Although it is a figment of the child's mind, yet it may assume for a time what seems to be an independent reality. An example of such vividness appears in the following: A girl of four screamed a warning to her father as he was in the act of sitting down on a sofa. When questioned she reported that her imaginary playmate (a monkey) was having a sick spell and had just soiled the cushion on which her father was about to sit.

The imaginary companion may appear in many forms, with varying degrees of vividness, and like other imaginative enterprises it may serve a variety of purposes in the life of an individual child. One purpose it serves, as the name implies, is to provide the child with a companion. Through this imaginative device the child can possess a playmate who is always at hand. Moreover, the playmate can be endowed with characteristics which the youngster desires but does not find in his associates in real life. However, the phenomenon cannot be explained simply on the theory that it is a child's means of meeting a need for agreeable companionship. For one thing, the companions described by some children seem to be rather disagreeable characters. Again, a child may describe several companions varying in congeniality.

Many motives other than a desire for companionship may be served by the imaginary character. The character may possess powers and virtues which the child lacks. He may have many privileges the child himself is denied. He may have the courage or the boldness to do things which the child himself would like to do but does not do. Again, the companion may serve as a basis for excusing or defend-

ing the child's conduct or his demands. A child with an imaginary family would try to excuse himself from various tasks by claiming that his husband, wife, or one of his children had a stomach-ache. Another boy had an imaginary uncle who always allowed children to do what they wanted; this boy also threatened to call upon the imaginary uncle to come and hit people who did not do what the boy wanted. These items illustrate only a few of the ways in which the imaginary character, like other forms ot make-believe, takes care of a variety of tasks.

Children's accounts of daydreams. In a study by the interview method by the writer and associates (1933), 400 children, aged five to twelve, were asked to describe their daydreams and imaginary companions. Over 30 per cent of the daydreams reported dealt with amusements, play, or some form of diversion. Specific mention of some form of self-glorification—of prestige or playing a superior or heroic role—was made in 19 per cent of the cases; many children also reported daydreams about specific objects which they wished to possess.

In this study, it was found that inability to describe any make-believe activity occurred more frequently among younger than among older children and more frequently among the less intelligent than among the more intelligent. Also, younger children and less intelligent children of all ages reported a larger proportion of daydreams dealing with specific objects and amusements than did the older and the more intelligent. The brighter the child, the more likely he is to entertain daydreams with a plot.

When asked about their imagined playmates, only about a third of the children observed in this study described creatures that seemed to have fairly definite and stable characteristics. (It must be recognized, however, that the interview method is not as well suited to a study of imaginary companions as is direct and more intimate observation.) The number of boys who reported companionships with special objects—such as a particular piece of furniture, a block, a toy, and so forth—corresponded closely to the number of girls who described companionships with dolls.

This finding is interesting for it indicates that boys have as much need for make-believe outlets as girls have. In our culture we not only permit but also eagerly encourage the little girl to give play to her fancies in the intricate life she lives with her dolls. But boys do not have a similar outlet which they can freely and unashamedly turn to.

Other Forms of Vivid Imagery and Association of Images

In addition to ordinary make-believe, special forms of imagery may be observed in some children. People differ in the vividness of their images; at one extreme are those who have difficulty in forming a clear image of an absent event, while at the other are individuals who report images almost as vivid as the impression derived if the event were actually before them.

A phenomenon known as *synaesthesia* also may occur in children of school age (and perhaps at an earlier time), as well as among adults.[3] A sensation from one sense modality has associated with it images from another modality. In "colored hearing," the individual reports, for example, that bass tones look blue and high soprano tones look pink. Or the synaesthesia may take the form of colors associated with certain names, as when a child of six reports that Mildred, her friend, is blue and Margaret is yellow, the number "17" is pink, and the word "rush" is gray. Tones likewise may accompany words, according to the testimony of those who report this phenomenon; thus, "paper" brings an association of soprano tones, "piazza" carries a tinkling sound, and so on.

The origin of the phenomenon is difficult to trace. Undoubtedly, experiences in the past have resulted in a more than usually vivid association between different sense impressions, so that the recurrence of one now revives the other; yet this conjecture leaves still unanswered the question as to why some individuals seem more susceptible than others.

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[3] For an interesting account of a case of synaesthesia persisting over a period of years, see Hollingworth and Weischer (1939).

Children's Dreams

Children's dreams, like their waking fancies, consist of material drawn from actual experience. Even more than in waking fancies, however, the events and emotional elements in a dream may be so diverse and confused that it is difficult to trace them to their source.

Early signs of dreaming. Little systematic information is available as to the age at which the average child begins to dream. Undoubtedly, much in the nature of dreaming takes place before the child is able to give a clear description. The first sign of dreaming may occur when a child makes outcries in his sleep or awakens in apparent fright. For example, a child aged two-and-a-half years woke up during the night, cried, and said that a cat was under the bed, and an hour later again awakened his parents and complained about a cat. The age at which the first signs of dreaming appear, as reported by parents, varies considerably with different children. A few children, as well as adults, according to their own reports either never have the experience of dreaming or never succeed in retaining a conscious recollection of their dreams.

Some children when they first begin to dream seem to confuse the dream with reality not only while still asleep and dreaming, but also, at least momentarily, on awakening. Thus a child as he emerges from sleep may look around searchingly and perhaps say, "There was a pony here; where did he go?"

In the interview study mentioned previously in this chapter, 400 children between the ages of five and twelve were questioned about their dreams. They were first asked simply to tell what they dreamed about and then to describe the dreams in detail. They were then asked to tell about their recurrent dreams and their pleasant and unpleasant dreams. At the end of the interview, each child was asked what kind of dreams he had most frequently, dreams he liked or dreams he did not like; and he was also asked whether he wished he would have no more dreams of any kind.

In the replies of the children, it appeared that a child's dreams are likely to reflect any kind of event, whether real or imagined, that

occurs during his waking life. The similarities in the general content of dreams of children of the age of five and six, as compared with those of children aged eleven and twelve, were more outstanding than the differences. Exceptions to this general rule appeared in a few minor categories.

The unpleasant dreams reported by the children somewhat more closely resembled their fears, as described in response to other questions, than the unpleasant events that actually had befallen them.[4] The children named dreams that appeared to be unpleasant somewhat more frequently than pleasant dreams. When asked whether they wished never to dream any more, less than half of the children expressed a definite desire to continue to dream.

Terror dreams. Unpleasant dreams, nightmares, and night terrors are a frequent source of distress in children and often cause concern to parents. A large percentage of children have rather intensely unpleasant dreams. The extent to which unpleasant dreams occur and some of the symptoms and conditions associated with unpleasant dreams have been described in a study by Foster and Anderson (1936), in cooperation with a large number of parents who kept records of their children's dreams for a seven-day period. The parents and children in this study represented all socioeconomic levels but included a larger percentage of the upper socioeconomic strata than is found in a normal sampling of the population. Some of the findings, as revealed through classification of the reports submitted by parents, are summarized in Table XXVIII.

The first entry shows the average frequency per week of various evidences of unpleasant dreams. From the frequencies shown for moaning and coming to an adult during the night, it can be inferred that a rather large number of the dreams recorded by the parents must have been quite disturbing to the children. The second entry shows that over 40 per cent of the children at the one- to four-year level exhibited at least one unpleasant dream during the seven-day period; the percentage drops to twenty-two at the nine-to-twelve level. Section C of the table indicates, among other things, that there

[4] The study by Griffiths, referred to above, describes ways in which children's dreams are related to their emotional problems.

is an increase with age in the percentage of dreams involving personal difficulties and a decline in dreams in which the unpleasantness is represented by animals and the dark and the unknown.

TABLE XXVIII

EVIDENCES AND FREQUENCIES OF UNPLEASANT DREAMS EXHIBITED BY 519 CHILDREN, AS REPORTED BY PARENTS WHO KEPT RECORDS FOR A SEVEN-DAY PERIOD[5]

Age in Years	1-4	5-8	9-12
Number of Children	81	215	223
A. Average Frequency Per Week of Various Evidences of Unpleasant Dreams:			
Moans during the night	.81	.57	.17
Comes to adult	.18	.16	.05
Reports bad dream in the morning	.21	.42	.26
Any evidence of bad dreaming	.93	.71	.39
B. Percentage of Children Having Some Unpleasant Dreams During the Week	43.0	39.2	22.2
C. Subject Matter of Bad Dreams (Percentages):			
Personal difficulties	26.7	33.3	54.5
Difficulties of friends, pets	13.3	6.3	18.2
Animals (probably strange or fearful)	40.0	15.9	9.1
Strange or bad people	6.7	20.6	13.6
The unknown, dark, etc.	6.7	7.9	.0
Loss of property	.0	4.6	.0
Impersonal dangers	6.7	9.5	.0
Miscellaneous	.0	1.6	4.5

Dreams are puzzling in the sense that all mental activity is baffling; the dream is more mysterious than some of our waking activities because the events that it includes are difficult to untangle. The dream may be influenced by external stimuli, by stimuli occurring within the body, by desires and fears and other emotional conditions that may be clearly defined or only vaguely understood during the person's waking moments. The elements of imagery and emotion in the dream may be highly distorted, and the logic of the happenings may be highly obscure.

The content of a dream sometimes seems almost to copy experiences of everyday life, and the characters in the dream seem easy to identify, but often the dream is like a strange occurrence, foreign to a person's experience, as though visited upon him from the outside

[5] Adapted from J. C. Foster, and J. E. Anderson, "Unpleasant Dreams in Childhood," *Child Development* (1936), 7:77-84. Reproduced by permission.

It is almost startling to realize and recognize the simple fact that the dream one dreams, no matter how foreign and bizarre it seems, represents something of oneself. Every image in the dream, however strange—every emotion, however gratifying or horrible—every impulse, however noble or savage—every sensation of pleasure and of joy, however sweet or salacious or colored with guilt—arises out of the reservoir of one's own thoughts and feelings. The frightful beast that threatens to devour the child leaving him screaming and in a state of panic was not thrust upon him by an outside demon; it is his own creation, made out of the substance of his own experience. The hostile people or animals who threaten to attack him are his own creatures. The terrifying beasts that pursue him are born of his own fears. The desires and lusts of the flesh which are gratified in his dreams are his own desires and lusts. The high place to which he ascends, and the high place from which he falls, and the pit to which he descends are heights and depths within him. The good deeds he performs, the struggles he undertakes, the fortune he finds, the tenderness he shows, and the love he receives in his dreams embody something within him. The dream often moves through curious symbols; but the substance of the dream is the dreamer himself. It is by reason of this simple yet almost startling fact that dreams can be so useful in the process by which an older person seeks to understand himself and in the process by which a child can be helped to understand himself.[6]

Projective Methods

The fact that children reveal their thoughts and feelings by way of imaginary situations has provided the basis for valuable methods of studying children.[7] The label "projective methods" has been used

[6] The work of Freud has given the greatest impetus to the study of dreams. See S. Freud (1936, 1950); also Gutheil (1939); Despert (1949); Fromm (1951); Kelman (1944); Weiss (1949); Horney (1937, 1939, 1945); and a review by Lussheimer (1947).

[7] For earlier discussions and some of the later reviews of techniques that involve an interpretation of imaginative productions, see Frank (1939); Lerner and others (1941); Murphy and Horowitz (1938); Sargent (1945); White (1945); Abt and Bellak (1950); Anderson and Anderson (1951); Goodenough and Harris (1950); and Symonds (1949).

more to identify some of these techniques. The individual is presented with a task or situation so arranged as to give him freedom to interpret or to improvise in his own way. He may be asked, for example, to complete an unfinished story, to tell a story about a picture, to do something with a "family" of dolls, or to tell what he sees in some ink blots, or in a cloud overhead. The purpose is to provide him with a means by which he indirectly and perhaps unwittingly reveals something about himself.

The brief account of projective methods which follows is intended to round out the present discussion and is not meant to supply a set of adequate directions. The descriptions will perhaps be sufficient to enable a reader to apply some of the methods in an informal manner in his dealings with children, but a more complete account of the method involved and of the scientific safeguards required would be necessary in order to use these methods in a competent way.

Play techniques. The use of a play situation for the study of children is illustrated by the reference to the doll family on an earlier page. It is possible to use a great variety of situations and equipment and to choose the materials quite deliberately to suit a certain purpose, such as dolls that represent members of different races, or fragile things which the child can destroy. It is possible also to use various kinds of equipment, furniture, miniature toys, and the like.[8] The play technique has been used both with children and adults. The technique has been used in the practice of mental hygiene both to obtain information about the child and also as a help in the course of his treatment.

Drawing and painting. Drawing or painting under free or quasi-controlled conditions provides the child with an opportunity to express his fantasies and, as such, comprises a graphic play situation (Alschuler and Hattwick, 1943). The child's choice of a theme for his drawing may reveal something about his interests, and in many studies it has also been assumed that various themes and particular

[8] Interesting accounts of children's play have been given by Bach (1945) and Erikson (1940). See, for example, the Driscoll (1952) Playkit. For a discussion of the use of play techniques in therapy with children, see Axline (1947). There is a further discussion of the manner in which children reveal themselves in their play in the chapter that follows.

aspects of a drawing symbolize particular desires and conflicts of various kinds. One variation of this procedure is finger painting, which has been described by Shaw (1934), and another is an analysis of drawing of the human figure (see Machover, 1949). Claims concerning the extent to which a child (or an adult) unknowingly reveals himself through his drawings and paintings are difficult to establish through scientific study, but a study of children's art work has large promise as a means of studying children. Sometimes, also, a drawing that the child has made may serve as a point of departure for discussion of what he is concerned about.

Response to pictures. The way in which a child describes, interprets, or tells a story about pictures that he sees may provide a good deal of information about him as a person. In the use of this procedure it is assumed that what a child sees in a picture or reads into it might reveal something about his own attitudes, his desires, his hopes, and his fears. One application of the use of pictures which has developed from studies of adults is the Murray Thematic Apperception test (1938). The test material consists of a series of pictures.

Story completion. Here again the assumption is that the way in which a child (or adult) completes a story might reveal something about his own inner life. An adaptation of his technique was used in a study, cited in an earlier chapter, dealing with delinquent and nondelinquent children. Various unfinished stories were presented which enabled the boys to complete a narrative in a manner that would be favorable to their parents or favorable to someone else. The assumption was that the more the youngster was attached to his parents, the more he would tend to favor them when given an opportunity—for example, to help them rather than a friend when, according to the uncompleted story, the parents and a friend had been in an accident.

The Rorschach Test. The Rorschach test material consists of a set of cards each one of which contains an enlarged "ink blot"; the ink blots vary in contour and include some that are in black and white and others that are multicolored. On being shown each ink blot the person is asked to tell what it might be or what it looks

like. There are standard directions for administering the test and very elaborate directions for interpreting the results.[9]

The theory underlying the Rorschach test is that the responses a person gives do not merely throw light on the way he perceives things or is able to imagine things but also represent an expression of an individual's personality. Various features are noted in the responses, such as an individual's tendency to see the thing as a whole or to notice each portion or a small detail, the attention he gives to form, color, shading, and movement, the total number of things he sees, the proportion of various types of response, and so on.

Other techniques. Other techniques have also been used more or less systematically to study children by way of their imaginative behavior, including the use of dramatics and puppetry. Various forms of "free association" and "word association" have also been used; the individual may be given a certain word and asked to respond with the first word he thinks of, or he may be asked to give a chain of such associations. The assumption is that such associations do not just happen in a casual fashion but that they may in the aggregate reveal something about the individual's emotional life.

Apart from such projective procedures as the foregoing in which the individual is studied indirectly, the procedure has also been used of directly asking an individual to tell about his fantasies and daydreams or to relate his dreams. Here again it is possible to go beyond the literal account into an attempt to interpret what the content of the daydream or of the dream might mean.

[9] For discussions of the Rorschach test see Beck (1937); Klopfer (1937); Klopfer and Kelley (1946); Krugman (1940); Rorschach (1937); and Ames, *et al.* (1952).

CHAPTER SIXTEEN

Children's Interests and Play Activities

This chapter will deal only with selected aspects of the topic of children's interests, since practically all the chapters in this book deal, in one way or another, with the activities children undertake on their own accord.

In an earlier section, we have noted how the young child seeks to exercise and put to use his growing abilities and powers. Just as "fish gotta swim, birds gotta fly," so the young child exercises his voice, his limbs, his mental machinery, and all his equipment as best he can. His early interests are a feature of the larger dynamic pattern of his growing capacities and powers.

Throughout the period of growth, a child's interests are closely related to his abilities. However, after the basic coordinations involved in the use of hands and legs have been established, and after language has become established and the child has acquired some ability to plan and to weigh alternatives, the scope of his abilities is so wide that the choices open to him become increasingly numerous and complex. As time passes, the channels through which he chooses to exercise his abilities are influenced to an increasing degree by opportunities that happen to come his way and by the conditioning effects of past experience.

Generally speaking, the younger the child is, the more will the things he *chooses* to do give an indication of what he *can* do or can *learn to like* to do. (There are exceptions to this, of course.) Thus, while still too immature to walk, the child does not show an interest in walking, and efforts to coach him or force his progress are of little avail. A further illustration is provided in a study in which it was found that two-year-old children showed little spontaneous interest

in the process of dressing themselves, handling buttons, and so forth (Key *et al.*, 1936). In another study, it was found that children at this age made relatively little progress when adults endeavored to coach and train them in buttoning (Hilgard, 1932). Lack of ability and lack of interest in the dressing process apparently go hand in hand. But at a later level when the child begins to be able to dress himself he will also be interested in trying his hand at it.

Play

A child's play is a serious occupation. It is through play that much of the work of childhood is done. Play is any activity which the child undertakes because he wants to, because it is sufficient and rewarding in itself. It is not undertaken for an ulterior benefit or to win praise or approval. Play is one of the most important means by which a child exercises his impulse to grow. It is a medium whereby he tries himself out, not simply in fantasy by way of daydreams, but actively in the flesh.

When a child is able to play freely he is able, spontaneously at his own pace and at his own chosen level of involvement and difficulty, to exercise his growing abilities, try out his developing powers, venture into new experiences and adventures. Play is a means by which a child moves from the known into the untried and the unknown. As such, play has tremendous importance in the progress of development and in the economy of daily life.

Play involves many features. At the beginning of any new experience play usually contains an element of risk. There is some risk involved when a child seeks again and again to stand alone, to walk without support, or to climb, or ride a bicycle, or to swim. There is an element of risk when young children run, dodge, chase, jump, and bump into each other. In this sense, play is an adventure. Even some of the simplest forms of play, at least potentially, have a slight element of possible risk.

In many of their play activities children deliberately make conditions somewhat more hazardous than is necessary. This can be seen in coasting, sledding, and climbing and also in conventional games.

For example, in ball play, the game not only becomes more complicated but there is a shift from a soft to a hard ball which is violently thrown and which might cause hurts and injury when it hits someone or if it is played clumsily.

Another important element in play is the element of repetition. Repetition gives the child the chance to consolidate the skills that the game calls for, and as he becomes more and more adept he gains freedom to improvise, to try out nuances, and to create innovations of his own. One result of this is that even though children in their play sometimes seem to be doing the same thing over and over again, the repetition may be very far from static. If the child, for example, has learned the elementary motor skills in running and dodging he has freedom to develop strategy, to try to anticipate the moves of his playmates, and to deal with them. Moreover, children often, after some repetition which has enabled them to master the basic skill, are encouraged to develop this into a more complicated movement. This has been observed, for example, in connection with children's rhythmical activities (Christiansen, 1938). As different elements of play are progressively more thoroughly learned, they become vehicles for other activities.

The fact that a relatively simple play activity can become the vehicle for a more complicated intention is sometimes seen in the play of boys and girls as they reach adolescence. Adolescent boys and girls often resort to very "childish" play, such as running and chasing and hitting, but this play is a means whereby they make advances to one another. Even a coltish forty-year-old man and a kittenish forty-year-old woman sometimes make their first advances to each other by means of childish play activities at parties and picnics.

These examples illustrate the fact that much more may be involved in play than what appears on the surface. An observer may think it rather childish for a fourteen-year-old boy or a forty-year-old man to go through the motions of making four-year-old passes at members of the opposite sex, unless he is aware that these childish motions involve a serious drama.

Through their play children can work toward serious goals without having to face the full test of reality. They can make a graded approach, as we have seen. They can venture without taking on the full consequences of an action or assuming full responsibility, as when they play at fighting or keeping house. They can explore and test and define their relationships with others while saving face in case of a rebuff. They can test their own limits or the limits of other people's patience, affection, grief, anger, and annoyance. By way of play they can offer and partially yield to temptation without promising to succumb to it or to follow up, as in kissing games.

Through play children can more or less safely express their needs, as when a child who desires affection cuddles up to another person in a game. They can experiment with what is forbidden, as when they play with sex, or exercise, within "the rules of the game," a desire to hit and punish. In their play children can also act out and try out various roles—the role of being the baby, the mother, the teacher—and, in the process, express openly by outcries and actions some feelings with regard to these roles that otherwise might be kept hidden. In this way (as in many others) a child's play serves as a kind of revealment to others and to himself. A child, in playing a role, may express a need to hurt others. He may submit to pain and thus express or imply a desire to punish himself. He may reveal a desire for being dominant or submissive, a desire for greater freedom or for security. He may show his apprehensiveness, or he may disclose a compulsion to be good or clean, proper and neat (or the opposite) in a manner that suggests he is anxious to please or has a partly hidden impulse to rebel.[1]

The fact that a child in a play setting will reveal desires, fears, grievances, and the emotional conditions which disturb him but which he dare not in a matter-of-fact way divulge to others and cannot even freely and openly face himself has provided the basis for the practice of play therapy. In the process of play a child may be

[1] For revealing accounts of the sources, functions, and uses of play, see Hartley (1952); Hartley, Frank, and Goldenson (1952a and 1952b); Harris (1950); Mitchell and Mason (1948).

able not only to formulate and reveal but also to "work through" and to receive help in working through problems that are supremely important to him in his private life.[2]

Children's Preferences in Games

Surveys of favorite play activities reveal certain general age trends and certain differences between boys and girls, even though the order of popularity of different play activities varies somewhat according to locality, season, socioeconomic background, and intelligence. Children's play activities parallel trends in motor, social, and mental development as described in earlier chapters.[3]

Among the toys and games that have been found to be popular with preschool children are "pattern toys" (beads, puzzles, peg boards, tinker builders—the younger children used these toys chiefly as materials to manipulate and carry); "raw materials" (beans, blocks, color cubes, a blackboard and chalk, spools); and locomotor toys (trains, wagons, tricycles) (Bott, 1928).

Among groups of kindergarten and first-grade children it has been found that the favorite choices of indoor playthings included building materials, especially blocks (most popular with boys), and painting and modeling materials ranked next; drawing and cardboard construction material were not very popular; and paper construction and sewing materials were least popular (Farwell, 1930). Girls' interest in paper construction material increased somewhat from the kindergarten to the second-grade levels. Girls were found to be somewhat more interested than boys in other human beings and in furniture, while boys (in this study and others) showed more interest in vehicles than did girls. This tendency on the part of girls to show relatively more interest in persons and, on the part of boys, to show relatively more interest in things, has been noted also in other studies.

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[2] Axline's *Play Therapy* (1947) is a classic contribution in this field. In introducing her account Axline says that "Play therapy is based upon the fact that play is the child's natural medium of self-expression."

[3] For some recent studies of children's interests, see also Van Dalen (1949); Tyler (1951); MacDonald, McGuire, and Havighurst (1949); and Kohlman (1951).

A gradual change of interest in play materials was observed in a study by Van Alstyne (1932) of children aged two to five years but some materials, such as blocks, clay, and doll corners (including dolls, doll equipment, and furniture), appealed strongly to children of all age levels. Three-year-olds showed more interest than two-year-olds in wagons and books; four-year-olds showed an increased interest in balls, beads, small cars, and scissors; five-year-olds showed an increased interest in crayons. The youngest children tended to play more with active than with sedentary materials, but at the five-year level there was about an equal interest in activity and sedentary occupations.

When children check the number of activities in which they engage, there is a tendency toward a decrease with age in the number of different activities that are named (Lehman and Witty, 1927b, 1930). Older children also tend to engage in more solitary games. One study (Lehman and Witty, 1927a) indicated that educationally retarded and accelerated children engage in about the same number of play activities as do children who are making normal progress in school, but there appeared to be a marked tendency among pupils who had low progress quotients to turn to social play activities, as compared with children who made normal school progress. There are differences also in some communities in the games played by children of varying socioeconomic status (see, e.g., MacDonald, McGuire, and Havighurst, 1949).

Among the games that are dropped with advancing age are many that consist to a large degree of gross muscular coordination (such as tag, dodging, pom-pom-pull-away, run sheep run). Many of the movements involved in these activities are incorporated into the more complex games that appear at later levels. Another form of play that diminishes sharply with increasing age is play of a make-believe sort, including playing cowboys, Indians, cops and robbers, house, and playing with dolls.

The decline with age is not limited, however, to make-believe games and relatively simple physical enterprises, for there is a high degree of mortality among games that require considerable skill and coordination. As children advance toward adolescence many of them

tend to become spectators rather than participants. Much of the activity stressed in their own games and many of the activities stressed in directed play periods at school fall into disuse. One of the activities most widely emphasized in recreational and physical-education programs, for example, is baseball; yet, after the elementary years, large numbers of children seldom find occasion to play baseball.

It might be maintained that play activities and games have served their purpose if they are sufficient to the time and age level at which they flourish. But much of children's play is not influenced solely by their own spontaneous interests, for the environment in which their interests are learned is to a large extent controlled by adults.

One practical problem connected with children's play is the provision of play space and recreation centers. This problem is not solved simply by giving the children a large amount of space and equipment, for many children, while making use at times of available space, will also be interested in playing on the streets and congregating where adults are going about their affairs. An interesting indication of this is provided in a study by Reeves (1931), based on a survey of street play in a large number of cities. It was found that a large proportion of the children (boys more than girls) were simply "hanging around" on the streets during their free time; on the average, less than half of the children who were in the streets were actively playing, and only a small proportion played organized games. The percentage of children on the streets bore little relationship to the amount of open play space available in the city.

The extent to which children frequent the streets when play space is available will vary, however, with the attractions afforded by the playgrounds. In some instances it has been observed that children are more likely to go to a playground if there is an able adult supervisor in charge. In the case of younger children, it has been found that children who for a long time have attended nursery school and kindergarten frequently become bored with repetitious play activities and look to adults for ideas and stimulation. As noted above, a child's ability to master and enjoy a performance may exceed his ability to invent or improvise a performance that will serve as a

proper challenge to his powers. This is all the more reason for giving children the benefit of the stimulation that a resourceful adult can supply.

Children's Interests

When children are asked to reveal their interests they not only mention things they like to do but many will also, if given a chance, reveal that they are bored with many of the things they are supposed to be interested in.

Tables XXIX and XXX present some of the results obtained in a series of studies in which children were asked, among other matters, to tell what they "liked best" and "disliked most" in and out of school.

In describing what they liked best at school, pupils of junior and senior high-school age less often mentioned academic subjects than did the younger children; on the other hand, the older pupils more often mentioned sports, industrial and mechanical arts, intellectual self-improvement, vocational preparation, and relations with other persons of their own age. The fact that children's responses are determined to a large degree by what the school offers is shown in Table XXXI. School *D* was equipped with a variety of gymnasium facilities, a swimming pool, good facilities in the fine arts, and opportunities for shop work. It is no doubt largely by virtue of this that the children in this school mentioned activities so provided relatively more often, and academic subjects relatively less often, than did children in some of the other schools. The influence of unfavorable neighborhood conditions is reflected in the responses of children in School *C*, which was situated in a community in which people lived in crowded circumstances and in which there was a good deal of violence and crime. The children in this school, it can be noted, were much more preoccupied with *people* and characteristics of people in naming what they disliked most than were children in the other schools. (This preoccupation with "bad" people was even more pronounced in reports concerning what the youngsters disliked most in their lives outside of school.)

TABLE XXIX

RESPONSE OF PUPILS TO THE ITEM, "WHAT I LIKE BEST IN SCHOOL." THE VALUES REPRESENT PER CENT OF PUPILS GIVING ONE OR MORE ANSWERS IN EACH CATEGORY[4]

Grade	1 2 3	4 5 6	7 8 9	10 11 12	1–6		7–12	
Age	6, 7, 8, 9	9, 10, 11, 12	12, 13, 14, 15	15, 16, 17, 18	6–12		12–18	
No. of Pupils	544	452 Boys and Girls	372	230	497 Boys	499 Girls	281 Boys	321 Girls
I. School plant and facilities	.6	0	.3	0	.6	0	.4	0
II. Games, sport, gym, recess, etc.	7.0	2.9	30.6	33.9	6.0	4.2	27.4	35.8
1. Games, play, playground sports	6.4	.7	2.4	7.4	4.0	3.6	6.8	2.2
2. Gym, physical education	.2	.9	27.2	26.1	.4	.6	19.6	33.0
3. Recess, lunch, "free time"	.7	1.3	1.1	1.7	1.6	.4	2.5	.3
4. Other	0	0	.3	0	0	0	.4	0
III. Parties, dances, etc.	0	1.3	1.1	.9	0	1.2	1.1	.9
IV. Academic subjects, information on various topics	77.8	85.3	57.3	45.7	78.5	84.4	49.5	55.8
1. Numbers, arithmetic, math	27.2	33.0	26.1	13.5	30.2	29.4	25.6	17.4
2. Spelling	8.4	23.0	9.1	0	13.1	17.0	5.3	5.9
3. Reading, language arts, writing	41.7	29.2	18.0	19.1	33.2	38.9	11.0	24.9
4. Nature study, science	1.1	4.2	5.6	13.9	1.4	3.6	11.7	6.2
5. Health	0	.4	0	0	.4	0	0	0
6. Social studies, community, world affairs, peoples, industry, biography, conservation, etc.	1.1	10.6	6.4	8.7	5.0	5.8	7.1	7.5
7. Miscellaneous	.2	0	5.1	2.2	.2	0	1.1	6.5
V. Arts, fine and dramatic	12.5	10.4	9.4	12.2	10.9	12.2	10.3	10.6
1. Graphic and plastic	11.8	7.5	3.8	.4	9.8	9.8	2.8	2.2
2. Music	.7	3.1	5.1	12.2	1.0	2.6	7.1	8.4
3. Dramatics	0	.9	1.1	.9	.4	.4	1.1	.9
VI. Mechanical and industrial arts, shopwork, etc.	0	0	9.4	7.4	0	0	18.1	.3

TABLE XXIX (*Continued*)

Grade	1 2 3	4 5 6	7 8 9	10 11 12	1–6		7–12	
Age	6, 7, 8, 9	9, 10, 11, 12	12, 13, 14, 15	15, 16, 17, 18	6–12		12–18	
No. of Pupils	544	452 Boys and Girls	372	230	497 Boys	499 Girls	281 Boys	321 Girls
VII. Domestic arts	0	0	3.8	4.8	0	0	.4	7.5
VIII. Personal self-improvement, vocational, self-understanding:								
1. Intellectual, improve mind	0	0	0	4.3	0	0	.4	2.8
2. Knowledge of human nature	0	0	0	1.7	0	0	.7	.6
3. Religious, moral improvement	.4	.4	.3	0	.2	.6	0	.3
4. "Commercial," typing, etc.	0	0	0	3.9	0	0	.4	2.5
IX. Special successes, awards	0	0	0	.9	0	0	.4	.3
X. Self-government, forums, discussion	0	1.3	.8	.9	.6	.6	.7	.9
XI. Monitor duties	.6	.2	0	0	.2	.6	0	0
XII. School privileges, requirements, discipline, management	.9	.2	1.1	.9	.4	.8	1.1	.9
XIII. People	2.4	6.0	3.5	8.3	3.0	5.0	3.2	7.2
1. Pupils (other than 3)	.9	1.1	1.3	8.3	1.0	1.0	1.8	5.9
2. Teachers	1.5	5.1	1.1	0	2.0	4.2	.4	.9
3. Boy-girl friendships	0	0	1.1	0	0	0	1.1	.3
XIV. Miscellaneous	0	.4	.8	1.3	.2	.2	1.1	.9
XV. No response, unintelligible	1.3	2.6	3.0	2.2	2.4	1.4	3.9	1.6

[4] From A. T. Jersild and R. Tasch, *Children's Interests* (New York: Teachers College, Columbia University, 1949). Reproduced by permission. Since a child received a tally of one for one or several items in a given category or subcategory, the cumulative total in the subcategories may exceed the value shown for the main category. This table *illustrates* children's interests at school, but it is not presented as *typical*. See wide variations between groups in Table XXX.

TABLE XXX

PER CENT OF CHILDREN GIVING RESPONSES IN VARIOUS LIMITED SELECTED CATEGORIES, WHEN REPORTING WHAT THEY LIKED BEST AND WHAT THEY DISLIKED MOST AT SCHOOL[5]

	Like Best	*Dislike Most*	*Like Best*	*Dislike Most*
Grade	1–6	1–6	7–12	7–12
Age	6–12	6–12	12–18	12–18
No. of Pupils	996	996	602	602
Games, sport, gym, recess, etc.	5.1	5.4	31.9	2.8
Academic information, subjects	81.4	42.7	52.8	46.2
Art	11.5	4.8	10.5	3.2
Mechanics, shop, domestic art	0	.2	12.8	3.7
People	4.0	4.6	5.3	15.1
Pupils	1.0	4.1	4.0	7.0
Teachers	3.1	.2	.7	8.0
Other	0	.2	.7	.8

TABLE XXXI

PER CENT OF CHILDREN IN GRADES 4, 5, AND 6 IN VARIOUS SCHOOLS GIVING RESPONSES IN SELECTED, LIMITED CATEGORIES WHEN INDICATING WHAT THEY LIKED BEST AND DISLIKED MOST IN SCHOOL[5]

	Like Best				*Dislike Most*			
*School**	*A*	*B*	*C*	*D*	*A*	*B*	*C*	*D*
No. of Pupils	176	368	200	176	176	368	200	176
Games, play, sports, recess, gym	3.5	2.6	19.0	51.1	1.4	6.8	4.5	2.3
Academic information	79.0	89.0	50.0	34.1	60.1	48.9	39.0	41.5
Art	10.5	10.4	15.0	21.0	6.3	4.9	5.0	11.9
Mechanics, shop, domestic arts	0	0	1.0	8.0	0	0	1.0	1.7
People	7.0	5.5	6.0	4.5	2.1	8.7	23.0	8.5
Pupils	.7	1.3	0	1.7	1.4	7.8	14.5	4.0
Teachers	7.0	4.2	6.0	2.8	0	.3	9.0	6.2
Other	0	0	0	0	.7	.6	0	0
Unintelligible, no response	3.5	2.3	3.5	2.3	23.8	27.8	15.5	15.9

* *A* and *B* are public schools located, respectively, in a middle-western and a southern city; *C* is a public school located in one of the most congested and unfavorable neighborhoods in New York City; *D* is a private school in New York City.

[5] Adapted from A. T. Jersild and R. Tasch, *Children's Interests* (New York: Teachers College, Columbia University, 1949). Reproduced by permission.

The following findings and interpretations have emerged from such studies as the one cited in the tables above and in other investigations.

When children express their interests, wishes, likes, and dislikes, or what it is in their lives that pleases them most, or has given them the greatest thrill, they give a great deal of emphasis to people and relationships with people.

As already indicated above, children's interests are influenced to a great degree by what happens to be available in their environment for them to get interested in. To a large degree, they like what they have learned to like (subject to their ability and maturity level.) This means that the interests children report tell more about what they have had a chance to learn to like than about what they might learn to like, if given the opportunity. Subject to such limiting factors as those named, there is a large element of chance in the interests children at a given level in a given school report.

Many children, as they move through the school grades, show a decline in interest in what the school offers by way of its academic program. In many communities there is a decline with age in educational morale. No doubt there are many reasons for this. One contributing factor is the competition of other interests. As children near adolescence, for example, the social contacts they can establish during nonacademic periods (lunch time, after-school hours) appeal to many of them more than does what is offered in class. However, in the case of many children it seems that the decline with age in enthusiasm for what the school offers springs from the fact that the content of the curriculum seems academic, arbitrary, and remote from their concerns.

In the study represented in Tables XXIX, XXX, and XXXI it was noted that many of the older children, with little encouragement from the school, showed an interest in various forms of self-understanding and self-improvement, and yet it was not apparent that such youngsters could see any relation between what they were asked to learn at school and their own desire for self-improvement. Probably there is a need not only to re-examine what is offered but also to interpret more clearly how the lessons the children are asked

to learn from day to day actually do or might fit in with their own desire to grow.

In the study cited above and in several other studies it has been found that in many schools the materials offered under the broad heading of the social studies are relatively unpopular as compared with some other subjects. In theory, one might expect materials under this heading to be potentially the most interesting features of the academic program. Actually, when children state what they would like to learn about many of them refer to materials which ordinarily would fall under the heading of the social studies (such as history, but not as commonly taught).

One difficulty apparently, in connection with the teaching of the social studies, is that teachers and textbooks tend to present the material more from the point of view of the academic concerns of adults than from the point of view of human problems and human strivings which children can understand. As indicated in another chapter, the writer is of the opinion that the closer a teacher can come to presenting a study of human affairs in terms of the elementary human motives and strivings involved, the more understandable the presentation is likely to be from the child's point of view. The raw material of human struggles, of hope, love, loyalty, greed, striving for power, guilt, fear, self-disparagement, hate, as it occurs in events recorded in history and in the day-to-day reports of events in the world is not so different from the raw material involved in the everyday strivings and frustrations of children.

Various studies have indicated that the interests adults possess, and in turn help their children to acquire, are constantly influenced by the interests and skills adults happened to acquire when they were children. Failure to acquire interests in childhood may leave lifelong gaps. Along with this there are many indications that the range of children's interests is quite restricted compared with the interests children might, with help, acquire.

In the day-to-day "interests" of children there is a good deal of repetitive and unproductive activity. Many children express boredom. Many activities that occupy a great deal of time (such as listening to

the radio before television became available) do not seem to represent strong interest but a lack of something better to do.

In most communities, in the study cited in Table XXIX, there was relatively little overlap between the things children reported they were occupied with at school and the things that preoccupied them most outside of school.

When adults were asked to speak about the interests they developed as children and the interests which they now, as adults, wished they had acquired, many expressed regret about having given so much time to conventional sports, such as baseball, which have little utility for later life, except for the spectator. They regretted having not spent more time in cultivating interests which they could more readily enjoy as adults, such as music. Many people seem to move into adult years possessing many potential resources for activity and enjoyment which never were cultivated and which never will be. This does not imply that the more interests a young person acquires, the more of a person he will be. The person who becomes interested in ten things is not necessarily better off than the person who acquires an interest in only five things, or two. Many interests may represent weakness rather than strength, a tendency to be diffuse, and a lack of conviction in any chosen line of activity. However, other things being equal, the more interests a child has at least a chance to taste or to acquire, the more chance he will have to hit upon some interests that are suited to his particular gifts. By developing interests that are in keeping with his particular abilities a child is helped to realize himself, and through this process he probably also can be helped to acquire a wholesome idea of his own worth.

Radio and Television Interests

The average child devotes many hours a week to radio or television programs. The picture is somewhat complicated by the fact that television is relatively recent, and until recently there were large sections of the country it did not reach. Surveys of television interests have not therefore been as complete and thoroughgoing as were the

surveys of radio habits that have been made during the past twenty years or so. However, it does seem, as a general proposition, that many of the findings that have emerged from studies of children's radio interests appear even more emphatically in studies of children's television interests, tastes, and habits.

On the basis of surveys of children's radio interests some years ago it was estimated in the elementary-school age range that the average child spent about one-seventh of his waking hours listening to the radio. Television programs probably engage even more time. What with Saturday and Sunday as well as weekdays, there are many youngsters who spend almost as much time during the week at the radio or television set as they spend in school.[6]

Television, by adding the visual element, not only gives added interest to many children's programs of adventure and other popular themes but also gives a graphic and meaningful portrayal of many subjects in the social and natural sciences and in current events.

It appears that programs dealing with "Western" themes, cowboys, the frontier, cops and robbers, crime and mystery, and interplanetary communication have as much of an appeal in television as they did in radio. As has been true in the radio sphere so also in the television sphere—many of the programs dealing with domestic dramas in the family, programs which present contests, and programs of a "variety" nature which are especially popular with adults also are outstandingly popular with children. It is likely, however, that television, if anything, is able to appeal to a larger fund of interests which both adults and children have in common than is true of the radio.

Television and radio programs continue to present problems in many homes, especially in connection with the daily routine, interference with mealtime, interference with homework, and with bedtime schedules. Television, like the radio when it was new, presents certain practical problems of home management and of sharing and of consideration for various members of the household, just as is true of many other factors that affect everyday life. The clashes of interest that occur in the home because of radio and television prob-

[6] For surveys and discussions of children's television interests, see Dunham (1952); Maccoby (1951); Marx (1953); Seagoe (1952); Shavon (1951); and Witty (1950, 1951, 1952).

ably do not precipitate any particularly new issue in the relationship between siblings or between parents and children. But obviously a particularly appealing television program can precipitate a pretty sharp clash when children would like to listen at mealtime or postpone their homework or postpone their bedtime beyond the time when most law-abiding and God-fearing people think their children ought to be in bed.

In connection with television, as has been true for several decades in connection with the radio, parents and educators raise many questions and quite a few eyebrows with regard to the emotional and moral content of what is portrayed. Here again, it probably is true that television has not added any particularly new form of temptation or novel kind of emotional threat, but it is true, of course, that a televised dramatic scene like an effectively portrayed radio scene can have an intense emotional impact especially by way of playing on children's feelings ot vindictiveness and fear, as compared with stories that they read or as compared with what they hear by word of mouth.

When children in large numbers prefer programs that adults question there may be right and wrong on both sides. Adults are prone to judge a program in terms of their own adult point of view. A program that seems trashy to an erudite adult may still be suitable for a child, just as a child's pants may fit him well even though they don't fit his father. There is another aspect to this, however: The fact that a child is interested in a program does not necessarily mean that the program fills a "need." Moreover, the critical adult has grounds for complaint, not against the child but against those who offer the entertainment, it a program simply takes advantage of a child's lack of knowledge and discrimination and plies him with distortions and humbug, or is false and unrealistic from an emotional point of view.[7]

[7] For references to children's radio programs, see Eisenberg (1936); Lazarsfeld and Stanton (1944); and Herzog (1941). A reasonably thorough review of findings in the radio field up to about 1945 was given by the writer in the third edition of this book. A bibliography on educational uses of radio was prepared by Cooper, in 1942, and discussions of standards for children's broadcasts have been offered by the writer (1938, 1943), and by Rowland and associates (1942, 1944), among others.

Reading Interests

The beginnings of reading interests appear in the young child's manipulation of books and pictures, his interest in looking at and identifying pictures, and his desire for storytelling and being read to. Many children are interested in being "read to" even before they can understand the words—apparently the flow of sound and the changes in facial expression and vocal inflection attract their attention (and the "reading" is no doubt all the more attractive if they are cozily nestled in the lap of the one who reads). Children thus show an interest in one feature or another of the total reading situation before the age of two years and even before they are a year old. Reading interests emerge out of experiences that go back to early infancy.[8]

When the child himself has learned to read, his reading activities and interests show certain age trends, both in the amount read and in the range of topics read. There are large, individual differences within each age level, however, and frequently it is difficult to tell to what extent children's interests have been influenced by custom and what happens to be available. Among trends that have been noted are the following: Prior to the age of five many children show a fondness for simple factual stories about happenings in the everyday environment, animal stories, nature stories, rhymes and jingles, and stories illustrated by pictures that can be discussed with an older person. Many children, as early as the age of three or four, are strongly attracted to "comic" books and ask to have them read to them even when it is obvious that they cannot understand the words or have a clear conception of the flow of the action.

The reading interests of individual children during the primary- and elementary-school period differ widely, depending in part on such factors as differences in intelligence, available materials, and

[8] A study by Almy (1949) shows how experiences related to reading are interwoven with the child's experiences and relationships with others long before he actually begins to read. For discussions of reading interests and factors that influence interest, progress, and the development of ability in reading, see Ephron (1953); Gates (1931, 1949); Hildreth (1949); McKee (1949); and Russell (1949a, 1949b).

the stimulus supplied by the child's associates and his elders. That interests at the primary-school level are not highly specialized is shown in a study by Dunn (1921). The children liked surprise and plot; stories about animals had a good deal of appeal to boys, and stories about children and familiar experiences had considerable appeal to girls. There was no evidence that children at the primary-school level were in an "age of pure fancy" or that legends and folk tales, as a class, were the most interesting materials.

With increasing age comes an increased interest in robust adventure, especially in the case of the boys. Realistic stories about animals likewise have much appeal. During the elementary years, girls tend to show more interest than do boys in stories of home life and domestic happenings, and girls show an earlier interest than do boys in romance. From a study of children in the fourth, fifth, and sixth grades, Lazar (1937) found that the following elements had considerable appeal: adventure, action, excitement, thrills, mystery, realism, suspense, child life, humor-mischief, animal life and nature, sportsmanship and bravery, sports, airplanes, and other inventions. Toward the junior high-school and the high-school age, an increasing number of children show an interest in history, biography, and in books and magazine articles dealing with the social and natural environment. Girls show more interest in sentimental fiction of the adult type than do boys, but both boys and girls are likely cheerfully to digest fictional materials that distort realities and deal with impossible situations. In addition to such trends, there is an increased taste for humor, and there is likely also to be some reading in connection with hobbies, how to make things, and the like (Gray, 1939).

In a study by R. L. Thorndike (1941) children's reading interests were investigated by means of a list of fictitious (but very plausible) titles, accompanied by such brief annotations as the following:

Bowser the Hound. Bowser went hunting rabbits with his master. What happened when they met Jimmy Skunk instead?

King of the Gangs. How Slick McCoy made himself king of the underworld. A story of gangs and gang warfare.

The Ghost Ranger of Lonesome Valley. Why were cattle always disappearing from Lonesome Valley? Who was the shadow that carried them away?

Me and My Job. What different jobs are really like. What to think about in picking out your job.

Cupid Takes a Holiday. Joan and Fred had always been good friends—just good friends and nothing more. Then Fred went away to college. When he came back he found a different Joan.

History of the Lutheran Church. The story of the Lutheran church, from the time of its beginning up to the present.

The list included both fiction and nonfiction with such topics as adventure and mystery involving boys and girls, animals and fairies, romance, sports, and hobbies, self-improvement, history, and travel. Boys and girls showed more differences in their preferences than did old or young or bright or dull children of the same sex (within the age range from 10 to 15 years). There were, however, differences between bright and dull children. The brighter children (with a median IQ of about 125) had interests resembling those of mentally slower children (median IQ about 92) who were two or three years older. This greater maturity of the reading interests of the brighter children appeared not simply (or even predominantly) in connection with scholarly or bookish topics but in connection with other topics, such as mystery and adventure. Within the same sex there were some titles that differed widely in popularity at different age levels, but there were many titles that appealed both to the youngest and the oldest children in the study. Of the ten titles that had the highest appeal for average ten-year-old boys, five were still among the top ten titles at the fifteen-year-old level.

In the sphere of reading interests, as in connection with other interests, it is a mistake to assume that children's choices are entirely "free" or a sure sign of their "natural" inclinations. Children learn what they are supposed to be interested in, in reading as in other matters. Once they begin to read, their interests in reading are likely to be influenced by the content of what they are given to read. It has been observed, for example, that reading materials are more or less loaded with emphases that encourage boys to develop somewhat different interests than girls and to develop different ideas as to what boys are like (Child, Potter, and Levine, 1946). Seward and Harris (1951) have also shown, by way of further example, that children's

reading materials sometimes place children in unrealistic situations in which they imitate adults.

Interest in fact and fancy. In their reading, children are both romanticists and realists. They will read fictional books that deal with situations that are not only impossible but absurd, but the same children may also read solid discussions of travel, biography, descriptions of other lands and people, and similar topics. Although children are thus quite catholic in their tastes, they are likely to exercise some critical powers in going from one kind of reading matter to another. If they have sought out a book that deals with actual happenings, they like to have a truthful and informative account, although they may prefer treatment of the dramatic and unusual to a systematic treatment of all phases of a topic.

That children prefer straightforward, factual material in books dealing with science and that adults may be quite mistaken in their judgment as to the probable appeal of a book has been shown by Williams (1939). Among other things, children in his study were not much influenced by the color and design of a book's cover or by general features of format. The content is what interested them most, and they wanted informative content—new information, explanations of how animals live and how things work—rather than rhapsodies about the glories of nature and the wonders of the subject under treatment. Many objected strenuously to devices that some authors inject to appeal to children, such as personification, glowing introductory essays that reflect the author's enthusiasm but tell no facts, or the device of having an indulgent adult enter into conversation with a child as a means of injecting both a human and an informative quality. Also it was noted that children would read books representing a wide range of "reading difficulty." If interested in the topic, a reader of eighth-grade ability would dip into a book of fourth-grade difficulty, and a poorer reader would delve into books that were above his reading level as measured by an achievement test. The important consideration was the child's interest in the subject and his ability to get the general flow of ideas from the context and the pictures, even if he failed to understand a large number of individual words.

In this study, adults were also asked to rate the books that the children had used and commented on. First, they were told to rate them in terms of their own reactions, on a scale ranging from most liked to least liked; then they were asked to rate the same books in terms of their judgment as to how well the *children* would like them. The interesting finding was that there was more correspondence between *adults' preferences* and children's preferences than between *adults' judgment* as to what the children would like and what the children actually did like. Broadly speaking, it would appear that one good guide for adults to follow in selecting books in the field of science for a child, assuming that they are choosing from a general area that appeals to the child and that they show some regard for his reading ability, is to select books which they themselves find most interesting. On the other hand, a study by Rankin (1944) of children's interest in fiction shows that some children's books selected by adult reviewing committees as being especially outstanding have been not at all popular with children. Among factors that seem to lower a book's popularity are a large proportion of descriptive matter, whimsy, and scenes and customs foreign to a child's background. The children reported that their choices of books for leisure-time reading were influenced more by librarians than by teachers but, far more, by recommendations of other children.

CHAPTER SEVENTEEN

Children's Ideals, Morals, and Religion

This chapter deals with aspects of moral development, the development of standards of conduct, children's heroes and ideals, and factors that shape children's religious attitudes.

From early infancy children face the impact of moral values and moral obligations. They are constantly reminded, openly or implicitly, of what is approved and not approved, what is good and what is bad. They meet spoken or unspoken attitudes concerning what is right and wrong. From the time when they are able to understand language, and even before, they constantly meet reminders of *oughts* and *shoulds*. The idea of obligation, of what one should or ought to do, should be or should not be, and the idea of what is right and wrong are imbedded in the daily thought and conduct even of the people who claim to be least governed by moral standards.

The underlying moral emphasis in much of the child's upbringing has a significant bearing on his developing attitudes toward himself and others. From an early age many children learn to appreciate the approval expressed when they are called "good" and learn to strive for such approval, even if it means a sacrifice of their desire to assert themselves as persons in their own right. Many children learn to defend themselves against the label of "bad."

The tendency to view life and oneself from a moral point of view can be seen in the concept of *guilt*. There is guilt as a kind of remorse or regret or self-criticism through which a person reviews his past experience and from which he can learn how to mend or change his conduct in constructive ways. Such remorse may be very painful with a sharp sting of shame and self-reproach, but it can have a very healthy outcome. But there is guilt also of a far less constructive

kind, guilt which involves a sort of repeated self-accusation that leads to nowhere and guilt in which a person blames himself to an unrealistic degree or on unrealistic grounds.

In the conversation and in the conduct, both open and covert, of older children and adults one can observe almost countless manifestations of the concept of guilt. The "guilty" ones are not found simply among those who have overly rigid standards of righteousness. The guilty ones are far more numerous and include many who profess no moral standards. Their guilt ranges from mild but unfruitful self-reproach to attitudes of harsh self-repudiation and deep despair. Among them are those who feel they ought to be better, ought to do better, ought to get things done without dawdling, ought to work harder at school, ought to be nicer to Mother, and so on, but don't do anything about it except to bring the same accusations against themselves again and again. There also are those who remind themselves in a self-disparaging way of numerous "ought-not-to-have's" in their lives. Among them are those who drive themselves to shake off reminders of their past, who bitterly blame themselves for past mistakes, "kick" themselves for not having thought of this or that but who derive nothing from it except a vicious circle of self-condemnation. There are those who openly admit they cannot forgive themselves and those who have no clear awareness of wrongdoing but who go through life as though they should apologize for being alive.

Moral Assumptions Underlying Child Psychology

It is not possible to deal with children without operating in terms of certain open or tacit moral assumptions. Even in the most rigidly scientific approach to a study of the psychology of childhood (or of adulthood or of personality or adjustment) moral values are explicitly or implicitly assumed. As soon as we favor one kind of interpretation of life and not another, or one idea or habit or attitude rather than another, or set up any standard (of "maturity" or "adjustment" or "efficiency" or "self-fulfillment" or even "development," and so on), we are assuming some kind of a value as a guide or measuring rod. Whenever there is any kind of selection or emphasis the choice is

made explicitly or implicitly in terms of some sort of criterion as to what is preferable or better or more expedient, and this involves an actual or an assumed value. This is a rather simple proposition, and yet it is worth emphasizing. The further we go in studying children and principles of development that might guide us in understanding children and in rearing them, the more impotrant it is to examine the moral assumptions underlying the problems we study and the conclusions we reach.

There have been many assumptions of value, both explicit and implicit, throughout this book. They are tied to the concept of self-realization. According to this concept, life has value. The greatest value in a human life, such as we are concerned about when we follow a child from his conception until the end of his mortal span of years, is the living of that life. The growing person who realizes life and its value most fully is one who is able to draw to the fullest extent, within limits set by heredity and circumstances, on the capacities and resources that go with life. This means developing and using his ability to sense, to think, to feel, to do, to enter into relationships with others, to venture, to struggle, to love, to sorrow, and to rejoice.

One particular moral attribute of a life so lived, when viewed from within, is that it has integrity, a quality that might be called "trueness to self" in the sense that the individual, whether his talents be great or small, is as genuine, authentic, and as free from pretense as a human being in his circumstances can be.

Factors in the Moral Training of Children

The development of an individual's moral standards and moral conduct is influenced by factors as complex and varied as those which influence all aspects of a child's development. On the intellectual side, moral conduct requires some understanding of standards and the ability to perceive the situations to which they apply. On the social and emotional sides, moral conduct is influenced by emotional factors in the individual's private life and all the circumstances that determine his attitudes toward himself and his relations with his

fellows. An individual's motor ability may have a bearing even on moral behavior (the abler the child is at games involving motor skill, for example, the less occasion he will have to cheat in order to win). Physiological factors also come into play in determining the strength of the temptation when there is a conflict between a person's physical appetites and his moral scruples.

Development of Moral Concepts[1]

A child's earliest formulation to himself of what is right or wrong, good or bad is in terms of rules and expectations set by his elders with regard to specific acts and situations. In time he learns more and more to formulate standards of conduct in general terms and to judge a specific situation in terms of the general rule, although this type of generalization seldom is complete, even in mature years. In time, likewise, he learns to formulate (or to rationalize) standards of conduct in his own terms and to give reasons for them, rather than simply to state that a thing is right because his mother and father have told him so and wrong because they say it is bad and punishable. At first he may regard the act of grabbing another's toy as wrong because his mother has told him it is bad, but later he may say: "It isn't fair or honest," or "It would make him feel bad," or "I wouldn't want him to do that to me, so why should I do it to him?" or some such statement. The advance from authoritarian standards to acceptance and formulation of abstract concepts of equality, fairness, and justice is seldom thoroughgoing, however. Even in mature years, a person's "morality" may consist mainly of conformity and fear of the consequences of non-conformity rather than on convictions and commitments of his own.

Some children are able at an early age to phrase some of their ideas of right and wrong in rather mature terms. This is illustrated in a study by Harrower (1934), who questioned children aged about six to eleven years concerning their ideas of cheating, as follows: "Why must you not copy from your neighbor? What do you think

[1] An extensive review of literature dealing with morals and character development has been prepared by Jones (1946).

about cheating?" As noted in an earlier reference to this study, children from homes of relatively high educational and socioeconomic status most frequently answered to this effect: "It doesn't do any good," or "One can't learn that way." Children from a poorer environment more frequently gave such answers as "Cheating is forbidden," "It is naughty," "It is a lie." At eight to eleven years, the type of answer most frequently given by the group of lower economic status was to the effect that cheating is unfair: "It is not fair play."

In this study, Harrower also questioned children concerning their ideas of punishment. They were told a little tale about two boys, Peter and Tommy, who were playing together. Peter had a lovely new engine and Tommy had a boat. Naughty Tommy suddenly kicked Peter's engine and smashed it. Now, what should be done with naughty Tommy? Should he be "smacked" (appeal to authority and a retaliatory concept of punishment), should his own boat be broken up (the idea of reciprocation—an eye for an eye), or should he be made to save up his pocket money until he can buy Peter a new engine (the idea of equity, restitution, or making amends)? Again in response to these questions, a majority of the poorer children, in the age range from six to eight years, gave the authoritarian answer: "Smack him." At eight to eleven years, a majority of the poorer children gave the third type of answer: "He should make up for the damage." A large majority of children from more privileged homes, both at the age range from six to eight and from eight to eleven, gave the answer that Tommy should replace the toy that he had broken. In both groups and at both age ranges, the "eye-for-an-eye" (break his toy) type of answer occurred relatively infrequently.

A study by Wolfenstein (1951) of the conception that children have of "goodness" indicates that younger children more than older children tend to identify that which is good with that which is gratifying, while older children have more of an idea of the postponement of gratification, leading to a future reward.

Other examples of moral concepts are given in Chapter Eight in connection with a discussion of differences in the moral ideas of children of high and low socioeconomic status.

In appraising a child's moral concepts, as in appraising his concepts on any topic, the answer a child gives to a direct question may fail to reveal the extent of his understanding. This is especially likely to be true if he is being called to account for a misdeed or if a question, in one way or another, puts him on the defensive. He may answer evasively, giving any reply that seems to be expedient, and sometimes his replies will be inconsistent,[2] as is also likely to be the case with adults.

Correspondence of children's ideas of right and wrong to the ideas of adults. In a study by Lockhart (1930), it was found that as children grow older they learn more and more to regard the law much as adults do. In the group as a whole there were not, however, significant differences between the responses of elementary-school children and those of adult students and lawyers.

School children in the fourth grade and above were compared with graduate students and lawyers in their attitudes toward certain laws. Twenty laws were selected, and various circumstances were described which provided motives for disobeying them, such as the saving of a human life when to do so would violate a law.

In passing, it is interesting to note that although there is generally much agreement between boys and girls with regard to moral standards, there also is a tendency with time to accept the view that these standards should be somewhat more rigorously applied to girls than to boys (Katz and Allport, 1931).

An interesting study of the moral judgments of children differing in social origins has been made by Liu (1950). Fifty-two white American children whose parents had been born in the United States were compared with fifty-two Chinese-American children whose parents had been born and raised in China, with respect to answers on several questions involving a moral issue. Both the Chinese and the non-Chinese children were of relatively low socioeconomic status. Liu draws the interesting conclusion that Chinese children showed more respect for adult authority, but they also passed more mature moral judgment. According to Liu, the Chinese-American children's

[2] See a study by Carmichael of the behavior of children when called to account for past irregularities (1930).

greater respect for authority does not necessarily involve subservience but love and identification and where there is love and identification, according to Liu, there is more freedom to think. Accordingly, the Chinese-American children in passing moral judgment on an act tended more than non-Chinese children in the same section of New York City to inquire into the motive or intention underlying the act. On this basis, they would tend to regard as more immoral the act of a boy who intentionally smashes one dinner plate than the act of a boy who accidentally stumbles and breaks half a dozen dinner plates. Similarly, on this basis they would regard as more immoral the act of a girl who accidentally cuts a little hole in a dress while playing with scissors when she had been forbidden to play with scissors than the act of a girl who accidentally cuts a big hole in a dress while she was cutting out a picture which she thought her mother would especially like.

Problems in the moral training of children. Many factors complicate the moral training of children. For one thing, moral injunctions are likely to clash with practical pressures in everyday life. Fite (1940) has shown, for example, that a child of three or four years may be strongly admonished by his parents never to hit or fight; but in the play group of which he is a member there is a good deal of fighting, so that there is a conflict between what parents have impressed upon him and the habits of the group to which he belongs. Moreover, if the child is a sociable creature, occasions are bound to arise when he is practically forced to defend his interests and his rights. If the child does not rise to his own defense he practically is denied the freedom to share and enjoy the social contacts and opportunities afforded by the group situation. On the other hand, when occasionally his moral fiber is put to too strong a test and he does take the aggressive, his response may lack spontaneity and he may, even at an early age, experience feelings of guilt. Such an impasse might be avoided, to some extent, if training were scaled to a child's maturity level. An adult's abstract moral stand against aggression may be splendid as a general rule of conduct and yet may be artificial and needlessly rigid when brought to bear against the normal tussles which arise in the social relations of young children.

Confusing and conflicting pressures. The moral training of a child at any age level is complicated by the fact that many confusing influences are being brought to bear upon him. For one thing, the moral admonitions of his parents and teachers often are out of line with the examples set by them. He is urged by his teacher to be friendly in his dealings with others, and yet he may notice that the teacher is carrying on a feud with another teacher and perhaps is showing favoritism toward individual pupils in the class. He is admonished against anger and vindictiveness and yet witnesses many examples of such behavior in the daily conduct of his elders. One of the most serious problems in the moral training of a child arises from the inconsistency of those who try to teach him. A discrepancy between what is professed and practiced by his elders may arise, in part, from the fact that his elders themselves are struggling with the difficulty that the spirit is willing but the flesh is weak, or they are genuinely uncertain as to what is the proper thing to do. Examples of discrepancies between what is preached and what is practiced by those who presume to be his moral guides could be multiplied indefinitely. Since adults are only human beings, some discrepancies are inevitable, but this does not solve the child's problem.

Apart from the fact that adults frequently are confused and divided within themselves is the further fact that different adults, whose influence is brought directly or indirectly to bear upon the child, may differ in the stand they take with regard to a given form of conduct. A further element of confusion arises from the child's difficulty in distinguishing between general rules of conduct and more specific rules of the game. Under some circumstances, a lie—whether white, black, or gray—is regarded as reprehensible by his elders; under other circumstances, a similar lie may not only be tolerated but encouraged. Again, depending upon the prejudices of the parent, a charitable attitude is required with regard to one group, while the same parent tolerates uncharitable attitudes toward other persons or groups. To steal from a public park or from a large corporation may not be regarded as real thievery, whereas stealing from a person is so regarded.[3]

[3] See C. B. Stendler (1949b).

Discrepancy of words and deeds. Such inconsistencies as those shown by adults between expressed ideas as to what is the proper conduct and what is actually practiced are exhibited by children at an early age. Most children, for example, will profess that cheating is bad, and yet a large percentage of them will cheat when an occasion arises. Most teachers will say that it is bad for pupils to cheat, but many of them do not hesitate to cheat when they themselves take examinations.

In the study by Fite (1940), referred to above, it was noted that a child might maintain during an interview that hitting is bad and then, in his actual behavior on the playground, exhibit a good deal of hitting. Another child might, during an interview, express the view that hitting is not particularly bad, but in his actual conduct he may exhibit less hitting than a youngster who verbally expressed a strong stand against hitting.

There may be a discrepancy even on a purely verbal level between acceptance of what the children have come to understand as "good" and their translation of this into something concrete. In connection with a study by the writer and his associates (1933), a number of children were asked, among other things, what they would do if they had a lot of money. In one of the schools in the study, a large percentage of the children stated that they would do good for others, and many of them described large philanthropic ventures. When, at a later time, the interviewer casually asked each of a number of such children what he would do if he found a quarter on the way home, it did not occur to any child that he might begin the good work on a small scale with a small sum. Here the children responded in terms of their own immediate interests. Obviously, such responses as the foregoing can readily be matched in the behavior of a large number of adults.

The greatest need in the moral training of children is that we as adults should set our own moral house in order. But to say this is simply to rename and not to solve the problem. For the moral inconsistency exhibited by our adult society represents a continuing unsolved problem. In addition to the shortcomings which an adult sees and confesses, there may be inconsistent currents in his moral

life which he does not see but which nonetheless confuse the moral training of his children.[4]

Honesty

Deceit in one form or another can be noticed in children at an early age. The child of three or younger may hide a toy that he has broken or assume an innocent expression and feign ignorance when confronted with his misdeeds. At an even earlier age he may pretend to be in great distress, by means of exaggerated cries or expressions of pain, to gain attention. And when he learns to talk, "I can't" frequently is far from the truth, meaning simply "I won't." He may also use definite falsehoods to gain his ends. Occasionally, however, what appears to be untruthfulness may mean that the child misunderstands or is unable to distinguish between the fancied and the real. A child will sometimes tell a tale spun out of his own fantasies. Fabrications of this kind may be a bid for attention, although many of the untruths spoken by the imaginative child are merely playful and can hardly be classed as deceit. It is dishonesty of the sort that is used for some practical end, either to escape discomfort or to gain something desired, that is most significant in the study of character, especially if an advantage is thus gained at the expense of others.

Many studies of children's lying and deceit have been made, outstanding among which is an extensive study by Hartshorne and May (1928). In this study older pupils were slightly more deceptive than younger children. In general, there was no outstanding difference in the deceptiveness of boys and girls. There was a positive relationship between honesty and intelligence. Children who showed symptoms of emotional instability (as measured independently by a standard test) demonstrated a greater tendency toward deceptiveness than

[4] Karen Horney (1937) has described pressures and contradictory ideals in our society that contribute to emotional conflict and self-deception. The fact that the position children take with regard to moral issues will be influenced not simply by the precepts taught by their elders but also by the attitudes that prevail in relations between the children and their elders has been emphasized in many writings (see, for example, Zucker, 1943; and Liu, 1950). Harris (1948) reviews studies showing the relationship between the attitudes of delinquents and unfavorable aspects of their relationships with others.

those who were better adjusted emotionally. When children were classified into four occupational levels, according to socioeconomic status, those at the highest level deceived the least; those at the second and third highest levels, progressively more; and those at the lowest level, the most.

Children belonging to the same family resembled each other more in honesty and deceptiveness than children matched at random. But the authors of the study believe it is possible that children would vary in deceptiveness even if all were brought up under similar conditions.

There was a positive relationship between cheating and low marks in school deportment.

Children who were friends, even though not members of the same class, showed more than a chance resemblance in the amount of cheating. Children who cheated less tended to be less suggestible. Children who were in charge of a teacher who was able to stimulate cooperation and good will cheated less than those who were taught under a more conventional and rigid routine; children who were members of organizations purporting, as one of their aims, to teach honesty, cheated about as much as nonmembers.

The findings in this study indicate that no generalized, uniform trait that can be labeled "honesty" characterizes the child in all situations. The child who lies, steals, or cheats in one situation may be quite without guile in another; he may be a brazen cheater when given a chance to copy in a test and be completely honorable in an athletic contest.

However, the fact that cheating is quite specific does not mean it occurs by chance. When a child cheats there is a motive underlying his behavior—he has something at stake, a desire or purpose. One situation may be seen as an important challenge to win or to succeed by hook or by crook, and another may not. If Tom is a rival of Jim he may cheat in an arithmetic test which Jim is also taking, but he may not have the same desire to succeed and the same incentive to cheat if Jim is absent. It may be very important for a child, from the standpoint of his own desires and aspirations, to win in a spelling contest but not very important to win in a game of

marbles. So he may cheat in one situation and not in the other. Again, he may undertake one activity with a desire to learn and to correct his mistakes (and in keeping with this, let his errors be known so that he can get help in learning), whereas, in another situation in which he desires only to "get by," he may cheat if that shortens or eases the task. Accordingly, a child may seem inconsistent in his tendency to cheat when his behavior is viewed from the standpoint of the external situation, and yet his tendency to cheat or to be honest may be consistent when viewed in the light of his own motives.

These findings with regard to honesty illustrate the fact that both nature and nurture play a role in determining how individuals will behave. One is not born honest or dishonest; nor does it follow that because one has a lower than average IQ he will be dishonest in his behavior. Inasmuch as deceit offers a means of meeting a difficulty, the person who is poor in wit is more likely to need methods which are classed as dishonest in solving certain problems. A person of high intelligence is likely to be more able to make certain adjustments without being deceptive. (But he may also be cleverer at cheating.)

Generosity

In an extensive investigation, Hartshorne and May (1929) used objective methods to study generosity and the readiness to serve others. Willingness to give up ice cream for the sake of helping someone else, to vote money (which each child actually received) to charity, to surrender attractive objects (in a kit which each child received as a present), to prepare materials for children in a hospital, and to work as hard for the group as for oneself were among the items that were tested. In this study, as in the study of deceit, it was found that the intercorrelations between the various tests were positive but low. Although it is probable that a child who is generous in one situation will show the same tendency, rather than the opposite, in another situation, one cannot with any degree of confidence predict from a single episode just what his behavior in general will be.

No consistent changes in the readiness to serve others were observed with relation to age. Bright children were somewhat more cooperative than normal and dull children; but the relationship between generosity and intelligence was low, as compared with the correlation between honesty and intelligence. This suggests that the greater honesty of the bright may not be due so much to greater virtue as to practical expediency, since the abler person can solve more problems without cheating. Another factor, however, is that the more intelligent person may be relatively more honest than generous because he recognizes the relative value placed upon these virtues by others. In one study of high-school children (Mitchell, 1943) it was found that, in rating various virtues, a much higher rank was assigned to honesty than to charity. In the culture in which our children are being reared it seems that George Washington and his hatchet are a symbol of higher virtue than is the Good Samaritan.

Children's Heroes and Ideals

Some insight into a child's values and his ideas as to what constitutes model conduct can be gained from his choice of heroes and ideals. To be sure, when a child names a given character as his hero or ideal, one cannot be certain how genuine his attachment may be. One child may name someone whom he himself sincerely admires and tries to emulate, while another may simply mention a character whose name he knows only through popular hearsay.

In various studies, several thousand children have been asked such questions as "Of all the persons you have heard or read about or seen, whom would you most care to be like?" or: "Whom do you admire most?" [5]

It has been found that younger children tend to name persons with whom they are directly acquainted, but there is a marked decline with age in ideals chosen from the immediate environment and an increase with age (from six to twelve years) in ideals chosen from history or from current public affairs. In several studies girls,

[5] Among investigations dealing with this topic are studies by Bateman (1916), Barnes (1900), Hill (1930), Macaulay (1925), and Havighurst (1946b).

more often than boys, have chosen characters from their immediate circle of relatives, acquaintances, and friends. Girls also chose male characters more often than boys chose female characters.

The fact that the range of characters whom children admire widens more and more beyond the immediate home environment as children grow older is not surprising, but it still gives a striking indication of the widening with age of the ranges of a child's interests and values. At seven years, in a study by Hill (1930), 30 per cent of the children who were questioned named fathers or mothers as their ideals. At ten years, this percentage had dropped to nine, and it showed a further drop to zero by the age of fifteen. This change reflects the child's widened interests. It cannot be concluded, however, that the influence of the parents had waned to a corresponding degree, and no doubt a different result would be obtained if children were asked, for example, whom they cared for most.

Whatever may be the motives or the sincerity underlying each child's choice, the ideal he chooses symbolizes to some degree the values that have been stressed in the culture in which he lives and the values within that culture that appeal to him. In individual cases, a child's choice of an ideal may tell much concerning his attitudes toward home, school, and society at large. In informal studies, it has been found, for example, that individual maladjusted children in the upper elementary grades may carry their revolt so far that they defy tradition, refuse even to pay lip service to conventional morals, and name a celebrated criminal as their hero and ideal.

Religion

All children in such a culture as ours are influenced by religious practices, ideas, and beliefs, whether or not they get religious instruction in the home or go to church. As Conklin has pointed out (1935), religion plays a large part in the lives of most people in one way or another. The tendency of children is to accept, rather than to reject, what they hear and read, especially if it ties in with their own desires and interests, and as long as they meet with no direct contradictions. Parents who do not provide religious instruction

sometimes discover that a child through his conversation with others and his reading has accepted many religious beliefs, and occasionally a child whose parents disavow religion may even acquire the habit of praying quite regularly for a time.

Factors influencing the meaning of religious teachings. A child's religious ideas and images will, of necessity, be influenced by his experiences in everyday life. This fact presents a practical issue to parents and teachers who endeavor to give religious instruction. If the instruction is to be genuine, it must not merely come by way of verbal precepts but must be interpreted also by the practical example set by the child's elders. A child's image of God the Father may include a blend of details from pictures he has seen and Bible stories he has heard. The image may vary from time to time, including now a kindly expression, now a wrathful countenance. His conception of the attributes of a fatherly God will be influenced, perhaps imperceptibly, by his experience of the attributes of his own father or of others in a paternal role. His ideas of sin will be influenced by his experiences of grief or remorse through having caused distress to other persons and by experiences of regret flowing from hostility or fear aroused by the treatment he has received as a consequence of having disobeyed someone in authority. His ideas of forgiveness will be influenced by his own experience of being forgiven by his elders. The idea of forgiveness will be a difficult one for him to grasp if in his own relations with his elders he finds it impossible to confide or confess his troubles and must bottle up his feelings of guilt and fears of retribution.

The younger the child, the more his ideas in matters of religion, as in other matters, will be built upon his own concrete experiences. These are likely to be elaborated by fantasies. His ideas may be influenced by a multitude of conditions, such as the physical appearance, atmosphere, and furnishings of the church; the odors and echoes of the church building; the confinement of movement imposed upon him if he must sit quietly longer than is agreeable to his limited attention span; the kindliness or austerity of his teachers; and so forth.

From early childhood through the elementary-school years, nu-

merous religious concepts will have relatively little meaning to him in the abstract, and a problem in religious education is how to translate religious concepts into terms that are meaningful.[6] Misconceptions through failure to understand the terms that are used can be seen when the child, for example, comes home and tells his mother about Jesus' twelve bicycles (disciples), or sings: "A wonderful guy (guide) is He," or is puzzled by "the consecrated cross-eyed bear" (the consecrated Cross, I'd bear). Children also are confused at times by denominational differences, and frequently they have difficulty in distinguishing between the form and intended substance of religious observances.

In a brief passage, Murphy (1937) has tried to construct a picture, from the child's point of view, of the way Jesus is sometimes presented. Children are likely to learn of Him, "not as an ideal grown-up who helped people, but as a little baby whose mother put him in a straw thing in a barn instead of a crib, and to whom queer-looking men in striped gowns brought presents no baby could use. They learn, too, that there was a bad king, with a ferocious face, of whom the baby's mother was afraid, so that she had to take him a long way from home, riding on an animal that is not seen in the city, nor even in the zoo."

Interest in the Bible. Children's interest in Biblical characters and scenes and in different portions of the Bible have been studied by Dawson (1900) in an investigation conducted many years ago in a New England community. Since results of such a study are likely to be influenced by the religious background and affiliations of the children involved and might also vary over a period of time, the findings cannot be regarded as typical for all children who have had religious training, but the general trends noted are interesting.

Age trends appear in preferences for various books of the Bible. Up to eight or nine years the children expressed most interest in accounts of the birth and childhood of Jesus and in stories concerning the childhood of such characters as Moses, Samuel, Joseph, and

[6] For an account of children's and adolescents' understanding of religious terms and concepts, see Bose (1929), Tanner (1906), Harms (1944), Franzblau (1934), and Ross (1950).

David. From nine to thirteen or fourteen years, portions of the Old Testament, especially the historical books, had greatest appeal. At about the age of fourteen, and from then until twenty years (the upper age level in the study), interest in the historical sections receded and there was a distinctly preponderant interest in the Gospels. Dawson also shows "age curves" for other portions of the Bible. From the age of about ten through adolescence, poetic sections of the Bible appeal to numerous children, although the number who chose these sections was considerably smaller than the number who selected the historical books and the Gospels. Books of prophecy received a few votes from the age of twelve and onward. The Proverbs and doctrinal sections received relatively little mention until about the adolescent period and then were preferred by relatively few children. At all ages, children expressed more interest in persons than in other elements of the Bible.

Children's prayers. One of the many aspects of childhood religion that adults have difficulty in understanding from the child's point of view is prayer. The approach that is made in teaching the child to pray often involves parents in many pitfalls, as when they teach the child to approach God as though He were an absentminded magician, given to granting any reckless or thoughtless petition that might be addressed to Him. The idea of praying to a higher power is usually accepted quite readily by children, who, in their experiences, frequently have occasion to be reminded of their own limitations and unfulfilled desires. The desires that lie back of the child's frequent "I wish" or "If only I had" and which he realizes vicariously in his own make-believe can readily be translated into the petition: "Please give." It is considerably easier, of course, to lead a child to petition that his passing desires be granted than to petition that he be helped to have desires and aspirations of the kind that should be granted and the determination to carry out these aspirations. The same, to be sure, holds true also of adults.

Although the "pennies-from-heaven" type of prayer is easier to learn—and also readily leads to some perplexity when the pennies are not forthcoming—it has been observed that children who receive religious instruction can, at a relatively early age, learn to voice pray-

ers more in keeping with theological interpretations of the purpose of prayer. Frequently a child will recite prayers that he has been taught without understanding what they mean and then proceed to express prayers of his own in less conventional language. In a study by MacLean (1930), it was found that a large proportion of children in primary Sunday-School classes described prayer in terms of "talking to God," with emphasis more frequently upon such factors as help in doing right, avoiding wrong, help in "trying harder to get the things we want," and thanksgiving than upon requests for concrete gifts. Children in the junior and intermediate classes likewise carried out this emphasis. In response to a questionnaire, 95 per cent of the children expressed agreement with the statement: "When I talk to God, I often find out what is right for me to do"; 90 per cent expressed agreement with the statement: "God answers prayers mostly when we do our best to answer them ourselves"; and 85 per cent agreed: "God won't give us anything we ask for, but He knows what is best for us and gives us that." In this group of Sunday-school children, 6 per cent expressed agreement with the statement: "It doesn't do a fellow any good to pray."

Sherrill (1939) cites the case of a five-year-old child (who must have been somewhat precocious) who was overheard to pray: "Father in Heaven, help me to be kind and good, . . . to know what's what; help me to know what is good and what is bad, and what is poison and what is not poison, and what is right and what is wrong. Amen." [7]

A child may also be moved to voice thanksgiving, as in the case of an eight-year-old boy who, while walking homeward after having delivered milk to a neighbor on Christmas Eve, with snow under foot and a clear sky above, and with keen anticipation of a good dinner and gifts to come, turned his eyes skyward and exclaimed: "Gosh, God, you're good—and help everybody to be happy like me!"

Effects of religious training. The influence of religious training on children has not been studied at all in a systematic manner. In the

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[7] Adapted from L. J. Sherrill. *The Opening Doors of Childhood* (New York: Macmillan, 1939), 193 pp. Reproduced by permission.

general literature of psychology there are miscellaneous findings dealing, for example, with such points as the honesty of children who have attended Sunday School and of children who have not (as measured by tests that give the children an opportunity to cheat), the generosity of such children (again as measured by limited test situations), the degree of "liberal-mindedness" (as defined by the investigator) of members of various religious denominations and of nonmembers, the religious affiliations of delinquents, and so forth. Such studies, while instructive as far as they go, have dealt with the problem in a manner that is limited and inconclusive.

This problem is one that is difficult to explore in a scientific way, especially since many ends sought by religious instruction reside in the subjective realm of faith, hope, and charity and since the objective good works of religion are supposed to be done with a minimum of fanfare. It is very difficult to measure the "inward" aspects of religious convictions and commitments, the attitude of religious devotion, and the attitudes of humility and compassion which many religions stress.

Even if measurement of outward and visible signs of an inward religious orientation were possible, it would be difficult to find a control group with which to compare the religiously trained individual, since religious influences are deeply imbedded in the culture and there is a large degree of overlapping between the morals and virtues that are promoted under religious and nonreligious auspices. By reason of this large overlap between the kind of training and influence brought to bear upon technically religious and nonreligious individuals, it is difficult adequately to measure the effects of religious training even on the more commonplace expressions of moral conduct.

Apart from this overlap on many points between those who have formal religious affiliations and those who do not, there also are large variations in the religious influences brought to bear upon children who technically receive religious instruction. One child may be sent to church by parents who never themselves attend; another attends with his entire family. In one case the religious practices of the child's elders may be quite perfunctory, while in another case

they occupy an important place in the family's everyday activities. One child's attention may be centered only upon some of the formalities and externals of religion while another's may be impressed by the feeling and concern his elders invest in their religion. Thus there may be a decided psychological difference between the experiences of two individuals whose training, as measured by the criterion of training and church attendance, appears to be similar.

Even more difficult to measure are the subtle and indirect influences. In her study of sympathy, Murphy (1937) reports an incidental observation concerning the relation of the behavior of young children to the religious background of the children's parents. The influences of the church were difficult "to detach from the deepest personality characteristics of the parents who had been identified with it [the church]." Among the children in the Murphy study, there were eight whose parents had been or who were then identified with the church. With one exception, the children were less aggressive than the median child in the group as a whole. In some of these children, the observers noted manifestations of gentleness and considerateness that seemed to indicate that patterns of kindness had become deeply assimilated by the families to which the children belonged. These observations, obviously, are not presented as conclusive; other children of other parents who profess a religious faith might not conform at all to this trend. But the observations are suggestive in pointing the way toward a line of study to discover some of the subtler ways in which a religious background in the home might be reflected in the everyday behavior of children.

A study of the effects of religious instruction would not only have to cover such ground as the foregoing but it would also have to appraise the more subjective phenomena denoted by such terms as peace of mind, relief from guilt feelings, a disposition to be forgiving and patient, and faith and hope as contrasted with despair.

Religion and Self-Realization

On an earlier page in this chapter dealing with moral development reference was made to two ideas that also have implications for the

discussion of religion—namely, the concepts of self-realization and integrity.

There are many parallels between the psychology of self-realization and psychological features of a religious view of life. In the process of realizing himself, a person will, among other matters, draw upon his capacity for entering into relationships with other people; the religious person will draw on similar capacities as he joins with others in devotion to a common cause. In realizing himself a person will, among other matters, draw upon his capacity for love; the idea of love is also central to most religious faiths. He will draw upon his capacity for realizing the joys and hurts, fears and hopes, struggles and disappointments, pains and gratifications associated with the venture of living which we in this book have referred to as compassion; most religions adjure their followers to be compassionate.

When we examine the concept of integrity as it relates to religion we deal with an area in which the growing person faces difficulty and confusion in the life about him, just as is true in the moral sphere. In the religious sphere there is a vast discrepancy between what is publicly subscribed to and what is privately embraced, between what is professed and what is realized as a matter of genuine conviction and commitment. Ross (1950) in a study of the religious attitudes of young people estimates that while about three-fourths of those who were questioned assented to various orthodox religious beliefs and doctrines only about 16 per cent seemed to show the kind of firmness of belief, zest, and security of conviction which might be expected in a genuinely religious person. In a Foreword comment on Ross' findings Allport (1950) speaks of the same paradox: Belief in God is almost universal; prayer is widely used; and there is a friendly estimate of the church, and a widely expressed conviction that man needs religion. Yet there is at the same time, in Allport's words, a "ghostly quality" about these attitudes. Many religious teachings are unclear to those who profess them, and their bearing on their everyday lives is vague. Allport alludes to findings by Ross which seem to indicate that only in about one-fifth of the population which professes religious attitudes can one find a religious sentiment operating as a kind of functional unity.

These observations, in the writer's opinion, touch upon a condition of confusion which faces children in our society. Whether or not the proportions that are mentioned in this study between those who give lip service and those who speak from genuine conviction are precise is not so important. The fact that there are dislocations of this sort is the important consideration, and it is not in the religious sphere alone that these exist, for we can find large gaps between what is assented to and what is realized as a genuine kind of personal involvement also in politics, in the teaching profession, in scientific bodies, and in all spheres and walks of life. We see the same lack of integrity when a politician, claiming to serve the public good, appeals now to the cupidity of this group, now to the passions of that, solely to exploit their unhealthy grievances in order to get votes. We see it when a scientist, supposedly devoted solely to the logical pursuit of truth, steps out of his role and passes judgments officially on others in a very unscientific and very emotional way.

Such dividedness, such a schism between the official pose and the personal life that is lived, is, of course, a commonplace. As the saying goes, "Such is life. What more can you expect?" Certainly it is true that such is life. The kind of dislocation here discussed can be found to some degree in the lives of all. So no one is fitted to sit in judgment upon others. Only an arrogant person would deem himself fit to cast the first stone. However, this does not free the child from the confusion and inconsistency he faces in connection with his upbringing. Nor does it free any adult from the implications of the struggle that is involved.

CHAPTER EIGHTEEN

The Growth and Prediction of Intelligence

This chapter deals with the development of mental abilities that are measured by intelligence tests.

The intelligence test is designed to measure an individual's ability to cope with situations that call for the exercise of mental processes, his ability to act in accordance with the demands of the situation that confronts him, to comprehend the situation and solve the problems it involves, to learn and to apply past learnings.

Numerous definitions have been made of intelligence, including varying emphasis upon the ability to learn, to apply past learnings, to carry on abstract thinking. Among the operations listed by Thorndike, *et al.* (1927) under the heading of intelligence are "a wide variety of operations such as we may call attention, retention, recall, recognition, selective and relational thinking, abstraction, generalization, organization, inductive and deductive reasoning, together with learning and knowledge in general." Other things being equal, according to Thorndike, the more intelligent person is one who not only can master a *greater number* of tasks and solve problems with greater *speed* but also is able to perform *harder* tasks, such as solving a mathematical problem which a lesser intellect never could master or reaching an effective solution to an economic problem that would bewilder a less able person with as much good will and access to pertinent information.

According to a definition by Stoddard (1943), "Intelligence is the ability to undertake activities that are characterized by (1) difficulty, (2) complexity, (3) abstractness, (4) economy, (5) adaptiveness to a goal, (6) social value, and (7) the emergence of originals,

and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces."

The usual intelligence test includes a number of concrete intellectual tasks yielding, in the aggregate, a total score. In tests of children, an important consideration is to select items suited and scaled to children's capacities at various maturity levels. Thus a young child may be asked to fit blocks of various shapes into holes of the same shape in a board, to repeat numbers that are spoken to him, to name objects or identify pictures of objects, and so forth. Items used with older children include tests of vocabulary, ability to solve problems of various kinds, immediate memory, speed of learning, ability to understand and interpret the meanings of written passages, to make deductions or inductions from observed facts, and so forth.

The Stanford-Binet scale. The best-known individual test is the Stanford-Binet scale, an instrument originated by Binet and subsequently revised and improved by Terman and by Terman and Merrill (1937). This scale consists of tests that are graded in difficulty from the age of two and upward and can be scored as passed or failed.[1] There are six test items at each half-yearly level from two years through four years, and six tests at each yearly age level thereafter up through age fourteen, after which follow tests for the "average adult" and "superior adult" levels. The test items at any given age level represent tasks that the normal child of that age has been able to perform successfully. Accordingly, a child's score on the test indicates his status as compared with that of other children.

A child's performance on the scale can be scored in terms of *mental age.* Thus, if he passes all the tests up to and including the third year and fails all tests beyond that point, he has a mental age of three years. If he succeeds on tests beyond the three-year level, he receives credit for each such success. Each of the twelve tests at the two-, three-, and four-year levels counts as one month of mental age; and each of the six tests at later yearly levels counts as two months of mental age. Thus, if a child passes all tests up to and in-

[1] This statement refers to the 1937 revision. An earlier revision included tests from the age of three upward, with six tests at each age level. For a survey of studies dealing with intelligence testing of children, see Harris (1952).

cluding three years, plus four of the twelve tests at four years, he is credited with a mental age of three years, four months, which means that his mentality is equal to that of the average child of three years and four months. Among other widely used intelligence tests is the WISC—Wechsler Intelligence Scale for Children (see Wechsler, 1949, 1950a, 1950b, 1951).

Intelligence quotient. To obtain an index of the child's brightness, when the Stanford-Binet scale is used, the *mental age* is divided by *chronological age* and the result multiplied by 100 to yield a value known as the *intelligence quotient.*

Thus a normal or average three-year-old child will have a mental age of three, a chronological age of three, and an IQ of 100. If the same child earns a mental score of four years, his IQ is 133; if he does no better than the normal two-year-old, his IQ is only 67.[2]

Other types of intelligence tests. The Stanford-Binet test is administered to one child at a time. There are other individual tests and there also are tests applicable to older children and adults that can be administered to several persons in a group.

Tests of infants and preschool children. Intelligence scales designed for children below the age of three have been developed more recently and are less reliable than tests for older children. As can well be understood, many difficulties beset mental testing at the level of infancy before a child has learned to talk and to understand spoken language, as well as all the other symbols, gestures, and facial expressions that come into play in a verbal interchange between two persons. Moreover, it is more difficult in the younger child to segregate the more strictly mental from the motor, social, and even emotional forms of response. The young child's response is also likely to be more variable.

Partly by reason of the difficulty of obtaining a measurement of more or less strictly "mental" performances in early infancy, the scales applied to infants are usually not referred to as "intelligence

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[2] When the test is used with adults the value representing chronological age does not become higher as the person becomes older; instead, an upper limit of fifteen years is set. Thus, a man of thirty with a mental age of twelve has an IQ of 80.

tests" but as measurements of developmental age, or mental growth, or maturity level, without the restrictive label of "intelligence."

An inventory of early mental growth in infancy and early childhood developed Bayley (1933b) includes such items as response to sounds, giving sustained attention to an object, securing a ring by pulling a string to which it is attached, and vocalizing.

Mental growth proceeds rapidly during infancy and early years. However, since a child's progress consists not simply in greater efficiency in doing what he has done before but in an increase in the number, scope, and variety of his performances, it is not possible to compute the rate of increase in precise, quantitative terms, as can be done in measurements of a child's height or weight from month to month or year to year.

Predictive value of infant tests. Infant tests, in their present form, do not give a very accurate prediction of what a child's future intelligence is likely to be. Generally speaking, the younger the child at the time he is tested, the smaller will be the predictive value of his score as an indication of the child's probable IQ in later years, although even in early infancy a markedly subnormal or a markedly superior rating may have significance for the future.

A child's ratings on *consecutive* tests, near in time, are likely to show a good deal of resemblance, but the longer the interval between two tests, the lower the resemblance is likely to be. Bayley found, for example, a positive correlation[3] of .57 between average

[3] To illustrate what is meant by a correlation coefficient two examples are given below. One example shows the correlation between IQ ratings based on two separate tests; the other, the correlation between IQ and strength of grip. In these examples, one of the simplest methods of correlation, known as the "rank-difference method," is used. It can be applied when there are only a small number of cases. The examples below include only seven cases, a number which is large enough for illustrative purposes but too small for ordinary statistical work.

The rank difference correlation coefficient is expressed by the symbol ρ. The formula used in the present case is:

$$\rho = 1 - \frac{6 \times \text{sum of } D^2}{N(N^2 - 1)}$$

The illustrations show that the subjects' scores must first be ranked. D represents the difference between the same subject's rank in the two tests; N, the number of cases.

scores at one to three months and at four to six months, and a correlation of .42 between scores at one to three and seven to nine months. As the interval increased, the correlations decreased, so that there was practically a zero correlation between scores at one to three months and scores beyond the age of twelve months. There was, however, a tendency for the scores to become more stable as the children grew older; thus, average scores at thirteen to fifteen

Individuals Tested	*IQ Test I*	*Rank*	*IQ Test II*	*Rank*	*D*	D^2	*IQ Test I Rank*	*Strength of Grip in Kgm.*	*Rank*	*D*	D^2
Albert	80	7	79	7	0	0	7	22	6	1	1
Henry	90	6	95	4	2	4	6	28	3	3	9
John	104	3	110	3	0	0	3	20	7	4	16
Peter	95	5	92	6	1	1	5	30	2	3	9
Palmer	140	1	135	1	0	0	1	26	4	3	9
Robert	120	2	125	2	0	0	2	34	1	1	1
Walter	100	4	94	5	1	1	4	24	5	1	1

$N = 7$
$N^2 - 1 = 48$
$N(N^2 - 1) = 336$

Sum of $D^2 = 6$
$6 \times$ sum of $D^2 = 36$

$$\rho = 1 - \frac{6 \times \text{sum of } D^2}{N(N^2 - 1)}$$

$= 1 - 36/336$

$= +.89$ (between the first and second test of IQ)

Sum of $D^2 = 46$
$6 \times$ sum of $D^2 = 276$

$\rho = 1 - 276/336$

$= +.18$ (between the first test of IQ and scores on strength of grip)

According to the examples given, there is a high degree of correspondence between the children's IQ's on Tests I and II. Each child maintains about the same rank on both tests. If each child kept exactly the same rank on both tests, there would be a perfect correlation of +1.00. If there were no consistency at all between scores on the first and second tests, the correlation would be 0. If there were a complete reversal of ranks, the correlation would be −1.00. For practical purposes, we would be able to make a fairly accurate estimate of what a child's rating on Test I would be if we knew his relative standing on Test I. In the second example, we find a positive but low correlation between IQ and strength of grip. On the basis of the figures in this example, there is a likelihood that a child with a high IQ will also tend to be above rather than below average in strength of grip. But the correspondence is so small that, if we tried to estimate his score in one test on the basis of our knowledge of his score on the other, our estimate would be little more than a guess.

months showed a correlation of .70 with a child's average ratings at eighteen to twenty-four months, and a correlation of .54 with average ratings at twenty-seven, thirty, and thirty-six months.

Many factors contribute to this lack of consistency: different rates of growth; irregularities in rate of growth; changes in adjustment to the test situation; and the likelihood that the test measures different functions, maturing at different rates, at different age levels.

Differences between children become greater with advancing age according to Bayley's findings. With increasing age there also was a greater spread in the performance of individual children on a given examination (as when a child of eighteen months performs at a level several months beyond that on some parts of the scale and no better than the average child of eighteen months on other parts).

TABLE XXXII

COMPOSITE OF TEST-RETEST CORRELATIONS FROM SEVERAL STUDIES OF INFANT AND PRESCHOOL GROUPS[4]

Age at Earlier Test	*Interval Between Test and Retest*							
	Less than 4 months	*4 to 9 months*	*10 to 15 months*	*16 to 21 months*	*22 to 29 months*	*30 to 41 months*	*42 to 53 months*	*Over 53 months*
Under 4 months	.57	.33	.10	−.03	−.09			
4– 9 months . .	.77	.53	.49	.23	.16	.46	.00	
10–15 months . .	.78	.66	.50	.45	.33			.55
16–21 months . .	.76	.68	.51	.44	.38	.41	.25	.33
22–29 months . .	.82	.74	.68					.43
30–41 months . .	.87	.68	.66	.49	.57	.57	.56	.66
42–53 months . .	.81	.65	.72	.71	.66	.63	.63	.41
54–65 months . .			.76		.73			

It was also noted that there was a positive relation between children's scores and the education of the children's parents after about the age of two years, but not before that time.

The findings also suggest that a series of tests from which can be determined the speed or rate of a child's growth over a period of

[4] From R. L. Thorndike, "'Constancy' of the I.Q.," *Psychological Bulletin* (1940), 37, p. 173. Reproduced by permission of the American Psychological Association.

time gives a more trustworthy prediction of his probable standing in the future than does a single measurement.

Consistency and predictive value of intelligence ratings at the preschool level. Beyond the age of two, there is a good deal more resemblance between intelligence-test scores from month to month and from year to year than is true before two. Even so, a child's score at the age of three or four does not give a very accurate prophecy of what the child's IQ will be at the age of six or seven and thereafter. The score may fluctuate considerably, up or down. But if the tests have been properly administered and if no unusual changes in circumstances have intervened, the chances are that in the average case a child's IQ at six or seven years will remain within the general neighborhood of his IQ as determined at the age of three or four. If there is a change, it is more likely that he will move, say, from an "average" to a "superior" classification, or the reverse, than from an "average" to a "very superior" classification, or the reverse; it is still less likely that he will move from an "average" to a "genius" or a "feeble-minded" rating, although shifts ranging as large as forty points or more have been found.

At the preschool level, as at the infancy level, the general finding has been that the longer the interval between testings, the smaller becomes the correspondence between scores made by the same child at one period as compared with another. The same holds true, but to a lesser extent, at the school-age level.

In a study by Bayley (1949) variability of scores on intelligence tests was noted in a group of forty children who were tested systematically from the age of one month through eighteen years of age. The children's scores showed considerable variability during infancy and then gradually became more stable, so that by school age and thereafter there was a high correlation between test results from year to year. It was also found, however, that there are considerable individual differences in ability at all ages.

On theoretical grounds, one might reasonably expect that there would be less constancy in rate of mental growth during earlier years. The child is progressing rapidly; new abilities are emerging and are being consolidated. A slight temporary acceleration or retardation

may produce larger upward or downward swings in the intelligence quotient than would be the case if the prevailing rate were slow. The child of six or seven years also is still maturing quite rapidly, but the farther along a child is in the process of maturing, the more his improvement takes on the form of greater power, sagacity, and scope in the use of capacities that can be remeasured from time to time, as distinguished from the emergence of new abilities.

However, the lower predictive value of tests at the preschool- than at the school-age level cannot be attributed entirely to irregularities in the growth pattern or to imperfections in the measuring instruments. As in infancy, so to a lesser but important degree at the preschool level, the reliability of test results depends upon the tester's success in winning the child's full cooperation and in enlisting the child's best effort. Resistance or fear on the child's part may interfere with the test. Even if there is no resistance or fear, the young child may fail to make a serious effort. Among other things, the child may fail to recognize the importance (from the adult's point of view) of doing things according to the letter of the tester's instructions, and his interest may turn to features of the test that don't count. Again, a child who has learned to conform to directions and routines in a nursery-school situation may have an advantage, when tested on the nursery-school grounds by a familiar person, over a child who is new to this situation.

A careful study by Rust (1931) shows how a child's resistance may affect his score, even when the test is administered by a person who is experienced and highly competent as a mental tester.

Constancy of mental test scores beyond the preschool level. As already indicated above, there is a relatively high degree of consistency in intelligence-test ratings from year to year at the school age and beyond. Individuals tend to keep about the same rank or relative position from age to age. The correlations between intelligence-test ratings separated by an interval of one or more years are far from perfect, however.[5] Fluctuations are likely to occur, but if the tests have been well administered and no outstanding changes in the

[5] For a review of findings concerning the constancy of the IQ, see Thorndike (1940).

child's circumstances have intervened (such as illness, emotional maladjustment, or transfer to a different environment), the upward or downward shift is likely to be relatively small in a majority of cases.[6]

It should be emphasized in passing that when psychologists speak of the "constancy" of the IQ they do not at all imply that the IQ will remain precisely the same from year to year. The concept implies, rather, that there is a high degree of probability (not certainty) that fluctuations will be relatively small in a majority of cases. Indeed, because of the variables involved in measuring the complex operations that constitute intelligence, it is improbable that a child would obtain precisely the same score on two equivalent forms of the same test, even if they were administered on successive days. In discussing results obtained with the best known of all individual tests for children (the Stanford-Binet scale), Terman (1919) some years ago pointed out that the chances were one in two that the IQ might increase as much as six points or decrease as much as four points; the chances of an increase of twelve points or a decrease of eight points were one in five; the chances of shifts larger than twelve points were considerably smaller but still impressive.[7]

Goodenough (1940) estimates that in tests of a group of 500 children under the best conditions, at least 100 may be expected, on retests, to show changes in IQ of as much as ten points; changes of as much as fifteen points may be expected in about twenty-five instances, and four or five children may shift as much as twenty points. Goodenough points out that even greater fluctuations may be expected if the tests are not administered by workers of equal competence or if comparisons are based upon results of different types of tests.

Errors in interpretation obviously will occur if a child's IQ, as determined by a given test, is regarded as a fixed value that can be used once and for all in classifying a pupil or in guiding his work at school.

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[6] Studies dealing with changes in IQ through environmental influences are discussed in a section that follows.

[7] For a review of studies dealing with the adequacy of some of the most widely used tests, see Harris (1952). For a later review, see also Harris (1953).

Again, misconceptions of another sort occur when it is concluded, upon discovery of a shift of many points in IQ on two different tests, that such shifts completely discredit the theory and practice of mental testing. Actually, those who have played the most responsible role in the development and use of mental tests are the ones who have acknowledged that the instruments are not infallible.

Fluctuation and error in test results. An incorrect estimate of a child's intelligence may arise if the child by reason of unique circumstances in his environment is at a disadvantage on certain test items. Thus a child who lives in an environment in which he seldom has a chance to use money is at a disadvantage on test items dealing with the names and values of coins. If a test involves items that are better suited to the experience of one group than another (as, for example, urban as compared with rural, or isolated mountaineer, or Indian reservation groups), it may yield misleading results (Jones, *et al.*, 1932; Klineberg, 1927; Sherman and Key, 1932; Eells, *et al.*, 1951). Also, if a child moves from a highly restricted to a more stimulating environment, he may exhibit a rise in intelligence, not so much by virtue of a change in his underlying ability as by virtue of the fact that his ability in dealing with the particular kinds of information and problems involved in a test is now better in line with his potentialities than it was at an earlier time. Fluctuations in IQ have also been found to be associated with emotional maladjustment (Gildea and Macoubrey, 1932).

Limits of Intellectual Growth

When tests of various mental operations are repeated, an increase in ability is usually found from year to year. The question may be raised: "At what age does this 'upward extension' or 'vertical' increase in intelligence come to an end?" Obviously, it would be impossible to distinguish precisely between changes in underlying abilities and changes brought about through the use or application of such abilities. There are differences between individuals with respect to the age at which an increase in capacity appears to taper off, but it also appears that there are differences, within the same

individual, in the age at which various intellectual processes reach their maximum development. There likewise is a difference in the pattern of the "growth curve" of different operations.[8]

The age at which individuals cease to grow in intellectual ability has been set all the way from thirteen and a half years to some time in the twenties. From studies based on repeated tests of the same people (still in school) it can be concluded that it is likely that there will be an increase with age in the kinds of abilities measured by intelligence tests through the late teens and perhaps into the twenties. In a review of earlier findings and from an analysis of the retest scores made by approximately a thousand persons, R. L. Thorndike (1948) concludes that ability to achieve on a standard type of paper-and-pencil test of intelligence continues to increase until age twenty and probably beyond. Thorndike points out that this holds for young people who are still continuing their schooling; whether it would also hold for people who are no longer continuing their education is a question.

The increase in ability that occurs after the time when intellectual growth has come to an end presumably consists chiefly in an increase in skill and knowledge—a "horizontal" extension, so to speak —rather than an increase in underlying capacity. The question as to when mental growth reaches its maximum has several practical implications. Among other things, the more individuals differ in the age of continuing intellectual growth, the less adequately will a test administered during childhood serve to give an accurate indication of a person's intelligence at maturity.

The question as to the rate and duration of mental growth during adolescence and beyond is interesting also from the point of estimating the future abilities of bright and dull children. If, for example, dull children continue their mental growth longer than bright children, they would tend to overcome some of the advantage of the former as they grow older; if the reverse were true, added years would bring an increase in the relative superiority of the bright. On this

[8] For illustrative "growth curves" of general intelligence and of different operations included in intelligence tests see, for example, Freeman and Flory (1937), and Conrad and Jones (1940).

question the evidence is conflicting. In a study which dealt in part with this problem, Freeman and Flory (1937) found that children of average ability continued to advance intellectually during the period of later adolescence in the same proportion as did the bright children and that they continued to advance to at least as late an age. According to their findings, "children or youth of lesser promise may profit by continued education as much if not more than their precocious and brighter comrades." These findings concern children of about average intelligence as compared with bright children and do not give data concerning children who are distinctly below average.

The Influence of Nature and Nurture on Individual Differences in Mental Ability

One of many indirect approaches to the study of the influence of heredity on intelligence has been to measure resemblances between parents and children. In an early study in this field by Pearson (1903), parents and children were compared with respect to certain physical characteristics, and the resulting correlations were about .50. About the same correlation was found when parents and children were compared with respect to certain mental characteristics. Pearson concluded that physical and mental characteristics in man are inherited "within broad lines in the same manner and with the same intensity." However, he did not dispose of the question as to what extent the resemblance in intelligence between relatives might be due to the fact that they share a common environment. Subsequent studies, using standardized mental tests, have likewise found a correlation between the intelligence of parents and children. One such study deals with 997 cases in 269 family groups, constituting a cross section of a New England rural and small-town community (Conrad and Jones, 1940). Mother-son, mother-daughter, father-son, and father-daughter comparisons were made. The parent-child correlations were all closely alike, averaging about .50. Other studies have likewise found correlations ranging in the neighborhood of from .35 to .50.

Positive correlations ranging upward to above .50 and tending to vary around .50 have likewise been found between the intelligence of siblings who live in the same home environment.

Of special interest has been the study of resemblances between twins. Twins have been classified into two groups, the *identical* (also called *uniovular* and *monozygotic*) and the *nonidentical* (also called *biovular* and *dizygotic*). Identical twins presumably develop from a single fertilized egg and therefore they have the same heredity, while nonidentical twins develop from two separate fertilized eggs and so, as far as their germ plasm is concerned, should correspond to the same degree as brothers and sisters who are born some time apart.

To the extent that heredity counts and uniovularity can be established, one should expect greater intellectual resemblances between identical than between nonidentical twins. Actually, this is what has been found. In several studies, correlations from .80 to .90 have been found between the intelligence of twins who are judged to be identical on the basis of their physical characteristics and who share the same environment. On the other hand, the correlations in the case of twins judged to be nonidentical (including twins of the same sex who definitely are dissimilar in physical appearance and "fraternal" twins—that is, pairs including a boy and a girl) range considerably lower, from about .50 to .70. High resemblances have also been found between identical twins reared apart, but the findings vary as to the magnitude of this resemblance, and large differences between separated identical twins have been observed. It appears, however, that the resemblance between "identical" twins who have been reared apart is likely to be higher than that between ordinary brothers and sisters reared in the same home. Kallmann and Sander (1949) found a high degree of similarity in monozygotic as contrasted with dizygotic twins in various physical and mental traits and such similarities appeared even in twins who had lived for many years in different environments.

Studies of foster children. Since a foster child shares the same environment but not the immediate biological heredity of the family or the group with which he is raised, the resemblances between foster children and foster parents, as compared with resemblances

between blood relatives in the same home, tell something about the effect of a common environment on the similarities normally found between the latter.

Two important early investigations of foster children as compared with children in their own homes, one by Burks (1928) and the other by Freeman and his associates (1928), disagreed as to the extent of the effect of the foster-home environment. Burks found that the correlations between parents and their own children were considerably higher than correlations between children and foster parents. A higher estimate of the effect of the environment was given by Freeman and his associates (1928). These investigators found among other things that children improved in intelligence after being placed in foster homes, the improvements being greater among children who were placed in the better homes.

That it is necessary to be cautious in interpreting the resemblance between parents and foster children has been emphasized in findings obtained by Leahy (1932). Because of the efforts of placement agencies to "fit the child to the home," a child might resemble his adopted parents quite apart from any influence which they may have had upon him.

In a study by Leahy (1935), in which care was taken to consider such factors as selective placement, it was found that the correlation between "own" parents and children ranged considerably higher (clustering around .50) than correlations between foster parents and children (clustering around .20).

A higher estimate of the influence of the environment is given in findings reported by Skeels (1938) and Skodak (1939, 1950). In one of Skodak's studies, some foster children whose true parents appeared to be incompetent and intellectually inferior exhibited IQ's that were well above average. Furthermore, the average child in a group of 154 children who were placed in foster homes in early infancy showed a higher level of development than would be expected on the basis of such information as could be obtained concerning the intellectual status of his parents. The findings also indicate, however, that environmental factors are not solely responsible. Intelligence ratings were available in the case of eighty of the true mothers of the

children who were placed in foster homes in early infancy; the correlation between the IQ's of these mothers and the IQ's of their children when first tested was practically zero (.06), but when the children were tested a second time, it was .24. In a later study, Skodak (1950) reports findings indicating that adopted children who are unrelated to each other but placed in infancy in the same home are as similar in intelligence at comparable ages as are natural siblings. Skeels and Harms (1948) report further findings indicating that children whose parents do not seem particularly promising from a hereditary point of view (mothers of low-tested IQ, fathers representing low occupational status) tend to resemble the mental level of the population as a whole when placed in adopted homes. As can be seen, the studies of foster children have given varying answers.

Findings with respect to the intelligence of foster children are of interest to people who are thinking of adoption. Unfortunately for such persons, the findings are not definitive, although they are conclusive enough (it seems to the writer) to satisfy anyone who genuinely wishes to adopt a child. On the one hand, the findings show that at least in individual cases a child whose family background looks very unpromising may turn out to be a bright child. It is only reasonable to assume that the better a home is, the more it should call forth the best there is in a child. On the other hand, the quantitative findings, considered in their totality, do not indicate that a bright husband and wife could adopt any child, chosen quite at random, and count on the home environment to produce a child with the same level of intelligence as theirs. (But neither can such parents be sure that a child of their own will be as intelligent as they.) In the writer's judgment, a prospective foster parent who thinks it is very important that his adopted child should be a *bright* child should think twice, for if he is genuinely interested in adoption, it is a *child* he should want, not an IQ. However, if prospective parents believe, from a practical point of view, that a bright child would fit more comfortably into their family situation in a given community, they obviously would select a child (if there is room for choice) whose true parents, as far as can be ascertained, were at least average in mental ability. This does not mean, necessarily, that they

should be above average in education or occupational status. It should also be remembered that the kind of mental ability measured by intelligence tests represents only a small feature of a child's total personality, and this ability constitutes only one factor among a great many that will determine whether a foster child and a foster parent will be good companions.

If prospective parents seek a bright foster child on the ground that such a child would fit best into their milieu it means that they either must be rather bright themselves or at least that they regard themselves as bright. It might be argued that if they really are as bright as all that, they should better be able to get along intelligently with any child, be he bright or not so bright, and better able to help him over the hurdles in his environment than parents who don't happen to be so intelligent. On this theory, the brighter they are, the less concerned they need to be as to whether the youngster happens by nature to be bright. But this theory probably is no good. High intelligence does not seem to carry with it, through its own native character or through the kind of discipline it customarily receives, a correspondingly high capacity for being considerate and understanding in dealing with those who do not happen to possess high intelligence.

The question of the relationship between the intelligence of parents (including foster parents) and their children becomes a very intimate and personal problem when it is linked with anxiety and guilt. If a child's intelligence does not depend on what he was born with, but on whether his home is really a "good" home and whether his parents are the sort of people who can provide a good home, then the parents are likely to blame themselves and to feel guilty if the youngsters they have adopted do not turn out to be bright. If they feel guilty things will be more difficult both for themselves and for the children, and it would be better if the issue had not been raised in the first place. So the same moral emerges: If a couple is thinking of having a child or adopting a child it is far better for them to try to make sure that their own motives in the matter are healthy than to try to figure out what the child's IQ might turn out to be.

Effect of Schooling on Intellectual Development

The question as to whether and to what extent a child's intelligence will be influenced by the amount, kind, and timing of the schooling he receives has important implications.

If a child's intelligence test scores vary according to the schooling he has received, several questions arise. Does this mean that intelligence tests are, to a large extent, a measure of the skills and performances a child has learned? Or does it mean that through his schooling the child not only has learned specific things but is also now equipped with a mind that possesses more power and incisiveness in dealing with new or different intellectual tasks than it would have possessed if he had gone to a different school or had not gone to school at all? If such a gain in power is produced, would it be possible through education to produce a race of adults with minds superior on the average to those of present human beings, just as the average human being now is superior to the average moron or (to put it in even more highfalutin terms) just as the average moron is intellectually superior to the average ape? These are heady questions; the research findings do not answer them conclusively but show the kind of speculation to which findings in this area might lead.

In several studies, most prominent among which were a series of studies conducted by Wellman and her associates at the University of Iowa, children who have attended nursery school have shown gains in IQ. In several other studies the findings have shown little or no change in IQ. The reported average gains following a year in nursery school, in studies in which gains have appeared, have not been large as compared with the differences between the IQ's of children in the population at large. In one of Wellman's studies average gains of about six to eight points were noted between fall and spring tests (1932).

One of the most interesting studies of the effects of the nursery-school environment (Skeels, *et al.*, 1938) was undertaken in a large orphanage. This study is referred to in an earlier chapter. The orphanage children came from poor homes and from parents who, in the

main, would be considered below normal. The orphanage itself provided meager stimulation; it offered limited opportunities, involved a good deal of mass treatment of the younger children, and was crowded and understaffed. From a large group of residents, matched experimental and control groups were selected. Both groups were kept in the orphanage environment, but for certain hours of the day the experimental group attended a nursery school that was established in the institution.

The usual preschool procedures had to be modified considerably at the start by virtue of the handicaps of these children as compared with the usual child who comes to nursery school from his own home. The orphanage children were lacking in their background of routine habits, in imaginativeness and enterprise in using materials, and in other respects. They showed an attitude of distrust that had grown out of their previous habit of shifting for themselves without the reassurance of parental protection. They were notably deficient in language development; their vocabularies, at most ages, were only one-fourth to one-half the size of those of children of average intelligence at the same age.[9]

Large changes in intelligence during the course of the experiment were noted in individual cases. Children who attended nursery school during a period of about twenty months showed an average gain of 4.6 points in IQ, as measured by the Kuhlmann or Stanford revisions of the Binet scale, while the control children during this time showed an average loss of 4.6 points. The direction of the change, especially in comparisons between subgroups, is noteworthy. During the period of the study, children in the higher classifications of intelligence, as compared with the general level of the group as a whole (IQ averaging 90 to 99 and 80 to 89), in the control group were heading toward lower levels, but the trend in the preschool group was not

[9] The opportunity which the nursery school gave to these children to overcome these and other effects of deprivation and psychological poverty in their customary environment will no doubt strike many readers as being far more important than the fact that they might also in the process gain in average IQ. For other studies dealing with developmental deprivation in children in institutions, see a report by Goldfarb (1943), which is referred to in Chapter Nine, and Bodman, MacKinlay, and Sykes (1950).

so uniform. Those who initially were about average tended to remain so, while those at lower levels moved upward. Children of the higher levels who were transferred to foster homes made gains in intelligence following placement, but such children from the control groups did not, within the time limits of the later observations, reach the level of children who had attended the nursery school. The findings in this study indicated, in other words, that the children in the better environment showed an improvement in average intelligence. Such an outcome is noteworthy and much to the good. However, far more arresting were the marks of deprivation that appeared in practically all aspects of the personalities of the children who had lived in such an unfavorable orphanage environment, and the marks of improvement in practically all aspects of their development which came when they had been in good hands for a time and got more decent care.

Because of the many as yet unsolved problems in connection with the measurement of intelligence, especially at the early age levels, it is not possible at the present time to give a definitive appraisal of the nature-nurture problem in the light of recent studies of preschool children. It is possible to hazard some generalizations, however. The findings mentioned above do not, by and large, promise that a child from a good home environment will be likely to show a substantial rise in IQ if sent to nursery school. (He may, of course, gain in many other ways, as has been shown in studies of the effects of nursery-school experience on children's social adjustments, habits, and skills.) The evidence cannot, however, be weighed simply by counting the investigations that show gains as against those that do not. By virtue of differences in educational programs and teacher personnel, it is possible that nursery schools vary in the extent to which they stimulate the child's intellectual development. It is likewise possible that even if programs were similar they might have a different effect on children who enjoy few advantages in their everyday lives than upon children who have many advantages.

This is suggested by Olson and Hughes (1940) who found that nursery-school children from privileged backgrounds did not differ significantly in their intellectual growth from nonnursery-school chil-

dren of similar backgrounds; and children who attended nursery school an average of over two hundred days did not differ significantly from children who, on the average, had attended only about half as many days. The investigators point out, however, that it might be argued that the home nurture of these children was already of such character that the nursery school could add little to it. They suggest also that different results might possibly be obtained if studies were made of children who suffer from deprivation in the home environment and for whom the nursery school might provide intellectual nurture more in keeping with their potential achievement.[10]

Effect of schooling on IQ's at the elementary-school level. In studies of older children gains in intelligence have been reported after children have been transferred from institutions to foster homes or from one community to another offering better educational opportunities. One study (as anticipated above) suggests that different schools may vary in the intellectual stimulus they afford (Starkweather, 1938). On the latter point, however, it appears that no large changes can be expected simply by sending children, who already have average educational opportunities, to relatively superior elementary schools or by transferring children from regular classes in a reasonably good school system to special "opportunity" classes. Pritchard, Horan, and Hollingworth (1940) report a study of 111 children of below average intelligence and socioeconomic status who were transferred from their regular classrooms in the New York public school system to special classes in a school that was designed to provide an optimal educational environment.

The children seemed to derive many benefits from the school's program, but these benefits did not consist in a gain in scores on intelligence tests. The program did not significantly alter the pattern of their mental growth as measured by standardized intelligence

[10] For other studies and comments on studies dealing with the effects of nursery school or kindergarten experience on intelligence, see Goodenough and Maurer (1940), a report of an experiment by McCandless dealing with very bright children (reported in Wellman, 1934), and other studies reported in the *Thirty-Ninth Yearbook* of the N.S.S.E. (1940).

tests.[11] The likelihood that an elementary-school program of a sort generally regarded as superior will not induce consistent or substantial gains in average IQ is indicated in a study by R. L. Thorndike and others (1940)

A question can be raised, of course, as to what constitutes a superior educational environment. But on this question, as on the question as to why some schools seem to produce gains while others do not, we have no definite information.

The question as to the relation between children's intelligence and the cultural and educational environment in which they live has been touched upon in studies dealing with children who have migrated from one environment to another. Klineberg (1935, 1938) obtained intelligence test scores of Negro children who had come to New York from the South with their families and found that those who had lived longer periods in the North earned higher average scores than those who had recently moved. Lee (1951) in a report of findings from Philadelphia in which tests and retests were made of the same children finds results that are, in the main, in keeping with those reported by Klineberg.

Another line of study which indicates how problems associated with a child's cultural background may adversely affect his reaction to an intelligence test has been reported by Anastasi and Cordova (1953) who gave intelligence tests to Puerto Rican children, most of whom used both the Spanish and the English languages. The over-all performance of the children was below the norm. The children's performance on the test seemed to be impaired by reason of attitudes they had formed. They appeared to have little or no desire to excel in a competitive intellectual situation, and they showed a lack of interest in the relatively abstract and intellectual content of the test. This reaction to the testing situation was apparently related to an attitude of being rather passive and unresponsive toward school, brought about in part, so it seemed, by the fact that they had been

[11] The authors add that the results might be quite different if measurements were made of factors other than changes in IQ, such as changes in degree of personal satisfaction and adjustment. A preliminary report by Featherstone bears out and amplifies this conjecture (1940).

thrust into an exclusively English-speaking environment at a time when they knew little English.

Apart from the question as to what difference one school as compared with another might make on a child's intelligence there is the question as to what difference it makes whether he stops going to school. Findings in a study by Lorge (1945) bear on this. A number of boys who were first tested in 1921-1922 when they were in the eighth grade were retested, twenty years later, in 1941. During the intervening twenty years the young people had continued their schooling for varying lengths of time; some had gone no farther than to the end of the eighth grade while others had gone beyond high school. The youngsters were now grouped in terms of highest grade completed by 1941 and in terms of scores earned in 1921. In a large number of comparisons that could be made on the basis of this two-dimensional grouping it was found that higher scores were earned by those who had gone on to complete higher grades in school. The farther persons went in their schooling (as measured by *highest grade completed*, not number of years of school attended) the higher their scores tended to be as compared with their original ratings in 1921.

Such findings show that "schooling makes a difference," but what is this "difference"? Does this ability to earn a higher score on an intelligence test mean a difference in "basic" intelligence? The answer is that "basic" intelligence, if we assume that such exists, can be measured only indirectly by means of a person's ability in dealing with intellectual tasks, and intelligence tests have been found to provide a good measure of such ability.

Such findings as these do not, of course, mean that intelligence rises in proportion to amount of schooling or that people with equal schooling will have equal intelligence. In spite of gains in scores of many (but not all) individuals who continued their schooling in Lorge's study, there was a high degree of correspondence between scores obtained twenty years apart (correlations of .62 and .64 respectively on the two instruments that were used at the time of the final test). Gains were relative to initial scores. Some children whose scores were among the highest on the first test and who went no

farther than the eighth grade earned decidedly higher scores twenty years later than did children initially in lower brackets who successfully completed two, three, or four grades in high school.

The studies by Wellman and her associates and a study such as the one by Lorge suggest that the potentialities that might be realized through nurture are greater than has commonly been supposed.

In passing, it may be re-emphasized that the value of nursery-school education or of later educational provisions can not be measured simply by "before-and-after" mental tests. Such educational provisions are usually not designed primarily to accelerate the development of abstract intelligence. As noted earlier, the opportunities so afforded may have an effect on the child's everyday habits and skills, his motor development, and his social and emotional adjustments, quite apart from any gains in IQ. There may be gains also in the child's "functioning intelligence," in the effectiveness and the ways in which he puts his intelligence to everyday use, even if there are no demonstrable gains in his intelligence quotient as measured by mental tests.

From everyday observation we can note that two children may have the same IQ yet differ decidedly in the way they use their abilities. Children may differ so much in their everyday behavior and adjustment that the fact of their similarity in intelligence seems to be a minor detail. Moreover, the manner in which intelligence functions in the life of an individual child will not simply depend upon environmental stimuli but will be influenced also by the constellation of factors that constitute what we call an individual's personality. Most of the research on intellectual ability has dealt with intelligence as a thing apart; relatively little systematic study, from a developmental point of view, has been made of the way in which mental ability functions in the child's "all-round" development.

Family and Socioeconomic Status and Intelligence

It generally has been found that children of higher socioeconomic status have a higher average level of intelligence than children of

lower status.[12] However, these differences are not so apparent while children are still quite young.

Needless to say, individual differences within each occupational group are a good deal larger than the differences between the average scores of different groups.

This question arises: To what extent is the higher average intelligence of children of the "upper" occupational levels due to a better environment, and to what extent is it due to heredity, or is the difference only an apparent one due to faults in the testing instruments? A precise answer cannot be given to this question. A child's environment obviously may have an important bearing, as is indicated by such findings as those reviewed earlier in this chapter. It is also possible that the native abilities of a child's parents played a part in determining their occupational status.

Davis (1948), on the basis of intelligence-test performance of children of lower and middle socioeconomic status, concludes that many tests are not as appropriate for children of lower status as for those of the middle group.

Intelligence and family size. Repeated investigations have brought out the fact that for several decades parents of high intelligence have had a smaller average number of children than parents of low intelligence. In Terman's study of gifted children, it appeared that the average number of offspring per individual in the intelligence level represented by gifted children was 50 per cent lower than that found for the same families in the preceding generation. According to these findings, the average person representing the stratum from which the gifted children were drawn produces 0.72 of a child. While this trend has appeared in the over-all population, it does not necessarily appear in every segment and it might even be reversed. One study (Osborn, 1939) indicates, for example, that the ablest men among the graduates in selected Princeton classes from 1891 to 1921, as measured by various criteria of success in and out of college, show a higher birth rate than the least able, even though the groups as a whole had a birth rate below replacement.

[12] For findings bearing on this, see Goodenough (1928); Terman (1925); Hollingshead (1949); Davis (1948); Gilliland (1951); Havighurst and Breese (1947); and Schulman and Havighurst (1947).

The finding that there has been, on the average, an inverse relation between family size and intelligence does not mean that if parents have many children the family as a whole will therefore have a low IQ; nor does it mean that if a family is small its members will therefore have a high IQ. The relationship indicates that parents with high intelligence have tended to limit the number of their offspring more, on the average, than parents with lower intelligence.

Gifted Children

Children with high intelligence tend also to be above, rather than below, average in many other characteristics, but by virtue of the fact that human abilities are uneven a child may have a very high IQ and still be rather mediocre in art or mechanics, or ability to get along with others. The fact that a person has very high abstract intelligence means that he possesses a very valuable resource which can stand him in good stead in his own ventures and in his relationships with others. However high abstract intelligence is no guarantee in itself that he will surpass others in insight into himself, in understanding of other people, in practical shrewdness, in "common sense," or ordinary "horse sense."

The most comprehensive studies of gifted children have been conducted by Terman and his associates, and by L. S. Hollingworth. The general findings are that children who are mentally superior as measured by intelligence tests are also more likely to be superior than to be below average in such matters as precocity in early language development, intellectual curiosity, information, academic achievement, range of interests, knowledge of moral concepts.

In later studies of bright children who first were discovered and tested at the elementary-school level it was found that after the passage of several years the children, as a group, exhibited much the same all-round superiority as they had displayed earlier. Individual children, of course, varied from the general trend, and some showed changes in IQ as they grew older.

In subsequent studies of children who earlier had been studied during elementary or high school years,[13] it was found that nearly 90 per

[13] For a full account of the findings, see Terman and Oden (1940).

cent of the boys and 85 per cent of the girls had gone to college. Although the gifted children were on the average nearly two years younger than their classmates, they were about three times as likely to graduate with honors. About two-fifths of the boys and one-fifth of the girls had earned half or more than half of their expenses as undergraduates. The gifted group received more than its proportionate share of class and student-body honors, except in athletics.

Although a large majority of the individuals made superior records in college, some did not. Of those who did not do well, the poor college record was not due to lack of ability, but to various other factors —such as lack of interest, maladjustments of various kinds, or deliberate neglect of college studies in favor of private pursuits or extracurricular activities. It appeared that many of those who did not do well in college had underestimated the amount of effort necessary to make a good record by virtue of the small amount of study required to earn good grades prior to college. Of those who had completed their training and could be classed as employable, less than 1 per cent were unemployed in 1936, even though this was a period of widespread unemployment. The moral record of the group was found to be "well above that of the generality." At least half of the boys were launched upon promising careers, and several of them were already nationally or internationally known.

An interesting conclusion is that, for children brought up under present-day educational regimes, the possession of an IQ in excess of 140 or 150 adds little to one's achievement in the early adult years. Above this level, adult success is largely determined by social adjustment, emotional stability, and the drive to accomplish. This does not mean, the investigators state, that the potentiality for achievement is the same for individuals with an IQ of 150 as for persons with higher IQ's. Rather, they state, the more probable interpretation is that we have not learned how to bring the highest gifts to fruition and how best to guide the personality development of those who are extremely bright.

In a review of literature in this field, Hollingworth (1940) also notes that as a group gifted children maintain themselves in superior fashion in their later academic work and in their adult adjustments.

However, there are individuals who do not do so well at maturity, indicating the important role played by factors other than intelligence. Intelligence alone is not enough for "success."

The fact that level of achievement and excellence as a person does not necessarily vary according to intelligence appears in an account by Hollingworth of exceedingly bright persons with IQ's of 180 or more (1942). A person of such towering intelligence may perform spectacular feats and yet, for lack of well-balanced personal qualities, his achievements as an individual or his contribution to society may be quite mediocre.

In passing it may be noted that the label "genius" is sometimes applied to children of high IQ. Actually a person is not a genius simply by virtue of having an IQ of 130 or 140 or more; he is not a genius even by virtue of having an IQ of 200, although he may be something of a freak.

Education of the gifted. Gifted children represent a valuable social asset. Although such children are quite resourceful in finding ways of putting their abilities to work, they cannot themselves create an environment that would bring out their full potentialities (Hollingworth, 1926, 1942). What often happens is that these gifted children are hindered rather than helped. Hollingworth estimates that in the ordinary elementary school situation children of 140 IQ waste half of their time and those above 170 IQ waste practically all of their time!

In one case, one of the most tangible results of a child's brightness was an increase in the amount of laundering that the mother had to do because the youngster cleaned the blackboards and erasers while her classmates were working at their lessons. Frequently a bright child becomes a strain upon the teacher, especially if the teacher resents pupils who know more than he or if the child not only knows much but also shows no hesitation in parading his knowledge and correcting others.

If a gifted child is promoted in keeping with his academic abilities, he may have difficulty because he has been placed with older and bigger children. Rules and regulations and customs and restraints of various kinds conspire to prevent him from realizing his potential-

ities, especially if his parents do not have the means or the desire to help; and it would be "an impossibly shrewd and strong child" who could work out his own education. Should he want to use some of his spare time to earn money for his own needs, he would not only encounter difficulties in getting employment but would also run afoul of truancy laws and child-labor restrictions.

Following are a few illustrations from Hollingworth (1939) of the problems of bright children in school. A ten-year-old boy with an IQ of 165 was referred as a problem: "Not interested in schoolwork. Very impudent. A liar." His trouble was by no means lack of interest. The teacher had resented the boy's superior knowledge and had given him a "raking-over" before the whole class. A friendly counselor to whom he was telling his troubles suggested that he should learn to be more tolerant. But the child was so filled with resentment that when told "One of the first things to learn in the world is to suffer fools *gladly*," he heard only the word "suffer" and replied, "Yes, that's it. That's what *I* say! Make 'em suffer. Roll a rock on 'em." As the conversation proceeded, however, he was "straightened out on the subject of who was to do the suffering. He agreed to do it himself." The epithet, "Perfesser," was thrown at another ten-year-old child, of IQ 175, when he tried to discuss events of medieval history; when he persisted, his schoolmates pulled his hair, tore his shirt from his back, and hit him with a beer bottle. Two other bright children came to the new school followed by reports that they were hard of hearing. Actually, they had good hearing; but in self-defense, "they learned not to hear the insupportable drill on things they had known for years," so that their teachers thought them deaf. When transferred to classes for bright children, their hearing turned out to be good, "almost too good!"

The children in Hollingworth's experiment were able to cover the regular elementary-school course requirements in less than half their time and were able to push far ahead into projects with which the average child, and even the average adult, usually does not become familiar. Hollingworth has emphasized that a program of intellectual training represents only a part, however, of the bright

child's needs. Quite as much does he need training and opportunities for the development of wholesome attitudes toward other persons and competence as a social being. Hollingworth lists five special problems of general conduct faced by bright children: to find enough hard and interesting work to do at school; to learn gladly to accept and be tolerant of others who are less able; to keep from becoming negativistic; to keep from becoming hermits; and to avoid the formation of habits of extreme chicanery.

The research studies cited above have emphasized the importance of social and emotional aspects of the development of intellectually gifted children, but this emphasis has to a large extent been incidental rather than central. Even in programs that have sprung up here and there for providing special educational opportunities for bright children the emphasis often seems to have been to spur them on to making the most of themselves as big intellects rather than to help them to make the most of their resources as real people. An "enriched academic program" is not necessarily what these children need most: Many of them are already strong enough and clever enough in that sphere. A child can be clever and yet have little understanding of himself; he can be encyclopedic in his knowledge and win prizes on quiz contests, and yet not be very wise; he can know a lot without being profound. These statements are truisms, yet the policy often seems to be that the best way to educate a bright child is to give him more of the same thing rather than to rethink what is being taught. These children already have the ability to dig up what they need along academic lines, if given some materials and directions. It probably would be better to choose a teacher for them who is kind, not just one who is clever; one who can interpret the feelings of ordinary folk to these bright children, not just one who knows a lot of facts. But, in the end, it is quite likely (so the writer thinks) that the more we discover an educational program that does the best to help a bright child to make the fullest use of his resources for living richly within himself and in his relationships with others, and the more we discover how to help the average or dull child to realize his resources, the more *alike*

rather than *different* the two programs are probably going to be—not by any means in the amount that is taught, or in the subject matter that is taught, but in the essential aim and approach.

Children of Lower Than Average IQ

What constitutes "feeble-mindedness" is largely a matter of definition. A frequent procedure is to class as feeble-minded those individuals who have an IQ below 70. Children with low intelligence can roughly be classified into various groups, with idiots representing the lowest group, then imbeciles, then morons. Next above the moron is the "borderline" group with IQ's between 70 and 80, then come those with a rank of "dull" (80-90 IQ), and then the "average" (IQ 90-110). In some educational writings children with lower than average intelligence who are unable to keep the pace with youngsters of their own age have been called "slow learners." These names and classifications are quite arbitrary; the individual's underlying ability, rather than the label, is the important thing to consider.

Mental deficiency is usually a condition which characterizes a child throughout his development. In the usual case, the defect is continuous rather than a condition which either suddenly or gradually sets in after a period of normal growth.

By reason of the fact that children at the lower end of the intellectual scale usually require special care and protection, considerably more attention has been devoted to them than to children at the upper end of the scale. Children who are feeble-minded or who have border-line or dull-normal intelligence have produced many problems in the elementary school. A large proportion of pupil "troublemakers" are youngsters with low intelligence. The "troublesomeness" of such children does not arise, however, primarily because a child of low intelligence has a special bent for getting into difficulties. The trouble lies more in the kind of demands that are placed upon him. Pressure is put upon him to keep pace with others in the conventional curriculum and to learn things which don't mean much to him; to learn them at a pace that is too fast; or to learn them in a setting in which he soon realizes that others are much better than

he and that he isn't much good. The less able he is in the usual school subjects, the less opportunity there is for him to enjoy the satisfaction that comes with achievement. Sometimes, to be sure, special remedial work can go far to help him gain satisfaction through mastery and thus provide more of an incentive for academic work. Also, as has been suggested in studies reviewed earlier in this chapter, many children of apparently low intelligence may have latent potentialities and may considerably improve their status under proper environmental stimulation. However, even the most optimistic interpretation of available evidence concerning environmental effects on intelligence does not suggest that mental deficiency can be eliminated by a program designed to raise the level of abstract intelligence of children who are below normal.

More important is the adjustment of educational demands and opportunities to the child's abilities, a policy which, in effect, might raise the level of the children's functioning or practical intelligence, whether or not there are gains in IQ. The problem of adapting educational procedures to children of lower mentality has been sharpened in recent years by the fact that children who, in the past, would drop out somewhere along in the grades when they reached the age of fourteen or thereabout are now compelled to remain in school. Some years ago, the high school population tended to represent a somewhat select group of children; but now, in many school systems, it represents practically a normal distribution of intelligence, including a large proportion of children whose minds are not especially receptive to classical high school requirements. This influx of a practically universal sampling of the population into high-school programs planned by ivory-tower scholars for a minority element has not been met by a realistic revision of this program.

Although good traits tend to be positively correlated, the bright children by no means have a corner on the market. The child who is less bright has potentialities for acquiring good social relationships with others. Furthermore, as noted in an earlier chapter, there is relatively little correlation between mental and motor abilities, and there are many everyday skills (except those that require a good deal of inventiveness and problem solving) that the less intelligent child can

master practically as well as the bright child. Indeed, such skills may be quite as remunerative as the more learned occupations (for example, the mechanic who makes a dental appliance may be getting a higher average rate of pay than the dentist).

One complication here is the pressure of conventions and parental ambitions, and of traditions concerning "high-brow" and "low-brow" occupations. Many children get the notion, quite early, that it is more honorable to head their ambitions toward the learned professions. As a result, the occupational preferences voiced by many children are out of line with what they eventually will be able to achieve or would find most satisfying. It is possible that as the school program is brought more into line with children's capabilities and as the influence of legislation that affects wages and working conditions takes effect there will be greater appeal in the kinds of work that a large majority of the children will ultimately have to do.

The answer certainly is not to water down the usual program for the people of average or less than average intelligence and to increase the dosage for the bright. The answer must be sought in the quality of the teaching and in the quality of the relationships between the teachers and the pupils, rather than in the quantity that is taught or even in the variety that is taught.[14]

[14] Some implications of this viewpoint are discussed in Chapters Eight and Nineteen.

CHAPTER NINETEEN

Personality Problems and the Search for Self

When we speak of an individual's personality we refer to the total quality, organization, and integration of his make-up and conduct. Many definitions of personality have been offered variously stressing the totality of an individual's behavior as shown in his conduct, his reputation, temperament, and character as judged by others and the inner organization of his drives and purposes and attitudes.

Among the component features of personality are an individual's objective, observable or measurable characteristics and abilities, his physical characteristics, his bodily size and physique, and factors in the mechanics and chemistry of his body that influence the energy and speed of his movements and the nature and strength of his drives. These physical features influence not only what others see in a person but also what a person sees in himself, for an individual's conception of himself is affected by the physical properties of his body.

Also among the features that enter into the totality of a person are his aptitudes and talents, his intellectual abilities, his manual dexterity, artistic skill, imaginative capacity, and his competence in countless enterprises that are involved in what an individual can do in serving himself and in dealing with others.

In addition, the features of personality that meet the eye include an almost endless list of qualities, "traits," habits, behavior patterns, and modes of action that denote what is characteristic of an individual's behavior. So we may note that he is vigorous or the opposite, gregarious or unsociable, that he tends to be irascible or domineering, and so forth.

To understand personality it is necessary also to take account of

subjective or "inner" components: the individual's motives, aspirations, and feelings; his ideas and attitudes regarding himself; his convictions, commitments, and purposes that give direction to his way of thinking, feeling, and acting; and the manner in which his "inner life" is organized.

Among the inner features of personality are those that are apparent (or seem apparent) to the individual himself, including the totality of a person's perception of himself, his conception of himself and of his attributes and properties, and all the various feelings and attitudes he entertains concerning himself. Another component of the "inner" make-up of personality includes tendencies that influence or determine the direction and content of his thoughts, feelings, and actions in ways that he is not clearly aware of. Included here are the dispositions which Freud and others have referred to as "unconscious" processes in the human personality. In earlier chapters we have referred to many such "unconscious" processes.

Early Manifestations

Many investigators have noted that babies at a very early age show differences in "personality." As we noted in an earlier chapter, each baby has his own ways and distinctive characteristics. Findings bearing on this point from studies by Shirley, Gesell, Fries, and others are reviewed in Chapter Three.

Consistency and Change

Not only do children from an early age differ from one another, but the characteristics that distinguish one child from another tend to show a good deal of consistency. In reporting evidence concerning this, Shirley (1941) gives the example of two infants, one of whom remained consistently the most irritable and the other consistently the least irritable in her group of subjects, even though both of the children during the course of the study showed a decrease in irritability in common with children in the group as a whole. Shirley noted also that as infants matured a given form of

behavior "waned and lapsed, only to be supplanted by another that apparently was its consistent outgrowth." For example, one baby was distinctive at an early age for his "timorous crying"; this crying waned, but then he exhibited "apprehensive watching" and, at a later age, showed a similarly timorous trend by hiding apprehensively behind his mother and by reluctance to play and talk in the presence of a visitor. Shirley also noted that there was a considerable degree of consistency in the general pattern of a child's behavior. When "profile charts" showing ratings and scores for each baby on a number of characteristics were prepared, the profiles of the different babies were so unlike in contour that the examiner could identify them without names; although the pattern changed with age, there were always "identifying earmarks." Usually one or two items were conspicuous for each baby.

The children who took part in Shirley's study of development during the first two years of life were studied again by Neilon (1948) when they were seventeen years old. Personality sketches of the children, unnamed, at the early age and at age seventeen were presented to judges who were asked to match the descriptions of the two-year-olds with accounts of the same children at seventeen. The two personality descriptions had so much in common that judges could match them much more accurately than might be expected by chance. However, the judges were inaccurate and quite in disagreement in the matching of some of the sketches.

The tendency on the part of the growing child to show himself as a certain kind of person and then to be true to this pattern as time goes on has also been noted by other investigators—Washburn (1929); Bayley (1932); Gesell and Thompson (1941); Shirley (1933b); and McKinnon (1942). This fact, of course, is an important one although it does not necessarily mean that a person's ways are inborn or completely fixed at an early age. Twins in a study by Gesell and Thompson (1941) were under observation until they were about fourteen years old. At the age of fourteen these children showed a high degree of similarity, as was true when they were infants, but they also showed some differences which confirmed differences that had appeared in early infancy. One of the twins (identified as twin

C) is described as showing more "sociality" than the other (twin T) at the infancy level and also at adolescence. In discussing this the authors point out that the mother stated that she had shown more affection for C than for T, and then they ask whether this factor of mother love might be responsible for C's greater sociality. The explanation, however, did not appear to be so simple. Actually, the mother was a stepmother, and the children did not come under her care until they were two years old. It appeared that the stepmother's greater affection for C was a consequence rather than a cause. By virtue of her own nature, according to Gesell, C possessed a greater fund of sociality. C was the more amiable. She had "a tithe more of the quality or state of being *lovable*," and as a consequence she attracted more of her mother's love than did her sister. According to Gesell, this characteristic of twin C was not created by the environment but deflected the environment.

The fact that a quality within a child, whether inherent or acquired, may be a factor in determining the child's environment can be verified now and then in everyday life. In keeping with the example above, it can be observed how a child who happens to be friendly tends to win friends and thus to build and to preserve a friendly environment. The child who, for one reason or another, is irritable and peevish tends to arouse impatience and annoyance in others, and by so doing he helps to produce an environment that fosters his peevish ways. The young child who shows an interest in mechanical things may receive a hammer and wrench and much other equipment that might further his interest in mechanics. The same tendency for reputation to confirm itself appears at the adult level. The person who happens to make a good speech may be asked again and again to speak and with practice become an increasingly proficient speaker as compared with another person who might, if given a chance, have become just as good.

While children tend to be consistent in their individuality it does not mean, of course, that no change occurs. As noted above the youngster may be conspicuously high or low in a certain characteristic and yet move along with developmental trends. The youngster who is more aggressive than others at the age of three may also be

more aggressive at the age of six, yet at the latter age show much less overt aggressiveness, in common with other children.

Again, as the child grows older there will be a change in the style of his behavior, and this change may be an outgrowth of something nascent or latent that could have been observed at an earlier time, or it may look like something new. Evidence of this appears in a study by McKinnon (1942) in which children were first studied when they were in a nursery school and then were followed through the first two grades of school. At the nursery-school age the youngsters were classified into four groups on the basis of their most conspicuous or prominent characteristic: "conforming," "invasive," "withdrawn," and "cautious." Ten of the sixteen children continued from the age of three to the age of eight or nine to be in the same classification. The changes that occurred were in the direction of "conformity." When changes did occur they were anticipated, according to McKinnon (1942), by earlier characteristics. Changes consisted primarily in a building upon characteristics that already had appeared, rather than in an about-face or in the tacking on of something strange or new. One child, for example, changed from predominantly "invasive" at three to "conforming" behavior at eight, but at both ages he was a youngster who was very eager to be noticed and accepted by other children. At three his techniques were crude and produced many conflicts, but at eight he had learned better techniques and was better able to enter into companionable give and take.

The tendency of a child to be true to his own pattern, as described above, has been emphasized in a study by Shirley (1941) of two boys who were handled quite differently by their mothers and who yet retained their individuality. One child in the study had a mother who seemed to try to keep him a baby, who sought to prolong his attachment to her, and who in various ways seemed to be rather anxious about practical details of his everyday care. Yet by the age of six this boy had grown into "an independent, objective little boy, . . . a person in his own right . . . who had laid the cornerstone for adequacy in adulthood." His mother, according to Shirley, had shown lack of firmness and inability to pursue a consistent

course of action, "leaving her baby to grow up on the shifting sands of insecurity," and the boy "therefore had to build his own foundation of security." He did this by means of different techniques at different times. He gained attention at first by crying, later by refusing to eat, and then as time passed his methods changed so that at the age of six he appeared to be a well adjusted and quite self-sufficient person.

The studies that have dealt with the question of ways in which a child tends to show constant characteristics in his personality development are limited in number and have involved relatively few children. Moreover, it would require more than two case studies, as in the study by Shirley cited above, to confirm and amplify the concept that each child is born with "a core or nucleus" of temperamental qualities.

When it is found that children show their individuality at an early age and that they tend to run true to form and to retain, throughout later childhood, characteristic marks of the individuality they showed as babies, this is an important fact whether or not the traits that persist can be ascribed to the child's heredity or stem from environmental factors early in the child's life. From the point of view of understanding the older person it is important to know that this is the kind of person he is, and that he has been that way for a long time. Whatever may have been the origin of his unique characteristics, they are features of a lifelong history. This has obvious practical implications. It means, among other things, that when we try to get a child to change his way of living, as often is the case in the guidance and education of children, and in the moral exhortation they are exposed to, we are, in effect, asking the child to modify a lifelong pattern.

The question as to whether or in what ways and to what extent the personality traits a child reveals early in his life and continues to manifest as time goes on might be inborn, a part of his original nature, has important practical implications even though it is a difficult one to answer. If children differ, by reason of their innate characteristics, in their tendency to be sensitive, to become hurt, to be yielding or to be defiant, to acquire attitudes of shame, to tolerate

much or little pain and frustration, then we might assume that they differ in their inherent tendencies to grow up as neurotic or healthy-minded individuals.

Impact of the Environment

The development of a child's personality is influenced in countless ways by the environment in which he lives. This section will not give a systematic statement of the role of the environment. This topic has been discussed directly or by implication in all preceding chapters of this book.

Problems of "Adjustment"

The question as to what are the forces in the environment that help or hinder the process of personality development becomes especially significant when viewed against the fact that a large proportion of children sooner or later suffer from varying degrees of "maladjustment."

Large numbers of children show maladjustment in the sense that they are seriously troubled and their way of life is restricted. One feature of a child suffering from a personality disorder is that his efforts to meet problems of the present are distorted by emotional aftereffects of unsolved problems in his past.

What constitutes a problem must be defined at least in part from the child's point of view. "Problems" which the parents see or which the school sees may not be problems insofar as the child himself is immediately concerned.

In addition, it should be noted that many of the problems attributed to children are "developmental" in nature and are part of a healthy struggle. As noted in an earlier chapter, the resistance a child shows to others while striving to gain independence may be a constructive thing, even though his parents view it (and him) for a time as a problem. Many problems persist for a time and then disappear in the process of development. Behavior which is characteristic of a certain level of growth and then wanes or dis-

appears should not be regarded as a sign of maladjustment, although maladjustment may ensue if the course of a child's development becomes distorted by the punishment and disapproval he receives.[1]

Varying adult standards. The adult standards by which a child's behavior will be judged vary considerably. A study by del Solar (1946) on this subject shows differences between the values which parents and teachers see in a child and differences in their judgment with respect to his weak points. In a study by Wickman (1928), which has become a landmark and which has stimulated a large number of investigations, it was found that teachers and clinical psychologists differed considerably in their rating of the seriousness of various problems. A summary of some of the findings is given in Table XXXIII. The clinicians, rather than the teachers, tended to rate various forms of transgression against authority as less serious, and evidences of insecurity, suspiciousness, unhappiness, and fear as more serious. The findings here do not mean that the clinical psychologists were right and the teachers wrong. The teachers and the clinical psychologists were looking at the behavior of children from different points of view. The immediate practical consequences of some forms of behavior are more serious to the teacher than to the clinical psychologist. Many of the items that stand high on the teachers' list are forms of behavior which the teacher, as an agent of the community, is not allowed to tolerate.

There have been many later studies in which the judgments of various groups (teachers, nurses, clinicians, parents) concerning the seriousness of various problems have been compared.[2] In some of the later studies, teachers and clinical workers have shown more agreement than was found in Wickman's study.

As we have noted elsewhere, the external characteristics of a child's problems may be misleading, and this must be taken into

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[1] MacFarlane (1938) shows that some problems show a decreasing incidence with age, including thumb sucking and failure to control the bladder. Certain conditions, such as food finickiness, timidity, and speech problems reach a peak at about thirty-six months and then subside.

[2] See, e.g., Bain (1934); Mitchell (1943); Stodghill (1931); and Bowles (1937).

account in interpreting such findings as those reported in Table XXXIII. It probably is a mistake to regard the children who openly and aggressively reveal their problems as more seriously disturbed than those who are submissive, quiet, and unobtrusive. The child who openly struggles may be less troubled than the one who quietly broods and dreams. It is also conceivable that when teachers take

TABLE XXXIII

THE SERIOUSNESS OF CHILDREN'S BEHAVIOR PROBLEMS, AS RATED BY 511 TEACHERS AND BY 30 CLINICAL PSYCHOLOGISTS[3]

(The table shows the ten problems of a larger list that were rated as most serious, and the ten that were rated as least serious, by the two groups.)

Teachers	*Average Rating*		*Clinicians*	*Average Rating*	
	Teachers	*Clinicians*		*Clinicians*	*Teachers*
Upper Ten:			Upper Ten:		
Heterosexual activity	17.3	9.9	Unsocialness	17.3	8.3
Stealing	17.0	12.5	Suspiciousness	16.4	9.1
Masturbation	16.7	6.4	Unhappy, depressed	16.2	11.5
Obscene notes, talk	16.6	8.8	Resentfulness	14.1	10.8
Untruthfulness	15.8	10.3	Fearfulness	14.0	9.7
Truancy	15.6	10.3	Cruelty, bullying	13.5	14.8
Impertinence, defiance	15.0	7.1	Easily discouraged	13.4	11.5
Cruelty, bullying	14.8	13.5	Suggestible	13.3	11.0
Cheating	14.7	10.3	Overcritical of others	13.2	7.9
Destroying school materials	14.3	5.1	Sensitiveness	13.1	7.0
Lower Ten:			Lower Ten:		
Dreaminess, unsocialness	8.3	11.3	Masturbation	6.4	16.7
Imaginative lying	8.1	7.5	Disobedience	6.4	14.1
Interrupting	8.0	2.8	Tardiness	5.6	10.5
Inquisitiveness	8.0	5.3	Inquisitiveness	5.3	8.0
Overcritical of others	7.9	13.2	Destroying school materials	5.1	14.3
Tattling	7.5	8.8	Disorderliness in class	3.4	11.7
Whispering	7.5	0.8	Profanity	2.9	12.3
Sensitiveness	7.0	13.1	Interrupting	2.8	8.0
Restlessness	6.9	6.4	Smoking	2.3	12.0
Shyness	5.4	12.5	Whispering	0.8	7.5

[3] Adapted from E. K. Wickman, *Children's Behavior and Teachers' Attitudes* (New York: The Commonwealth Fund Division of Publications, 1928), pp. 124-126. Reproduced by permission of The Commonwealth Fund.

a serious view of the aggressive child and not of the subdued child they might make things worse, for in taking action against the aggressive child they may make him more aggressive, and by ignoring the behavior of the child who is dreamy, shy, and sensitive, they in a sense encourage such a child to continue to suffer in silence. In the same vein, one might say that the child who masturbates (high on the list of "serious" problems in the teachers' ratings in Table XXXIII is dealing with his impulses in a more forthright way than the youngster who might be equally obsessed with sex but gives himself over to sexual phantasies. Further we might say that the child who is actively misbehaving is in touch with reality, if only in a negative sort of way, while the child who is dreamy, shy, and furtive withdraws from reality.

All these surmises are probably true, at least in emphasizing that the unobtrusive child who does not actively make trouble for others may need as much help as the troubled child who is taking his trouble out on others. But this does not mean that the condition of the openly troublesome child is not serious. If we could see below the surface of the child who is aggressively disobedient, restless, and impertinent we might find that his aggressiveness is a cloak for anxiety. He may not at all be the cocky child he seems to be, but a very frightened child. His impertinence may be a very shadowy thing which diverts attention from his lack of assurance. His defiance of authority when he plays truant and breaks school property may be a type of recklessness, similar in kind, but more childish in character, to the recklessness of desperate adults who ask for trouble in a self-destructive way.

The most significant question in connection with children's "behavior problems" is not, of course, the question as to whether one "problem" is more or less serious than another, but the question as to what this problem might mean, what kind of a struggle it represents in the child's life, and what the teacher might do to increase his understanding of the child so that he might establish a helpful relationship with him. Back of each problem there is pain, and each is a mute plea for help, but each problem also represents

something constructive, for it means that a struggle is going on, and where there is a struggle there is hope.

Incidence of Problems

The fact that a large proportion of children have unsolved problems of greater or lesser severity is indicated in studies cited in earlier chapters on the subject of fear, jealousy, anger, and other emotional states. Similar testimony comes when children have been questioned directly with respect to their inner difficulties or when they are judged by teachers or by their associates or are observed individually in more intimate psychological studies.[4]

It has been estimated by Griffin and Line (1940) that a teacher facing a class of forty children may anticipate that before these youngsters have completed their life span seventeen to twenty-six of them will have suffered from conditions ranging from unhappiness and a sense of futility to criminal behavior and insanity.

A study by Rogers (1942a) gives an indication of the extent to which children of elementary-school age are maladjusted as measured by such objective criteria as not having been promoted, being an academic or intellectual or chronological "misfit" by virtue of deviation from the group in reading ability, mental ability, or age; being a truant; being rated by classmates, teachers, or visiting observers or on the basis of results of an inventory of adjustment as having unfavorable characteristics of various kinds. A child was judged to be "seriously maladjusted" if he fell in the "maladjusted" category according to four or more of the procedures used in the study. Twelve per cent of the 1,524 elementary-school pupils in the study were seriously maladjusted according to this standard. In addition, 30 per cent gave evidence of being poorly adjusted, although

[4] For studies dealing with this issue as it pertains to children and adults, see Mathews (1928), Griffin and Line (1940), Rogers (1942a), Rennie and Woodward (1948), Steinbach (1933), Redl and Wineman (1951), Ullmann (1952), National Committee for Mental Hygiene (1946), and U. S. Children's Bureau (1949). A study by Boynton *et al.* (1934) deals with the problem of the relationship between emotional instability in teachers and signs of emotional instability in pupils.

not to a degree that would place them in the seriously maladjusted category.

In a survey by Ullmann (1952) of the nature and extent of mental health problems presented by children in the ninth grade in a public school system, the teachers identified 8 per cent of the children as likely sooner or later to have serious problems of adjustment.

When children are studied on the basis of closer and more intimate observation than can be achieved by scales and ratings the evidence concerning the weight of emotional difficulty in childhood becomes even more impressive. In a class of thirty children there are many who may be more or less acutely disturbed even though they are not obviously "maladjusted." A clinical worker may identify children who are anxious but conceal it. A study by Pilzer (1952) indicates that children can be quite disturbed and yet make a good adjustment at school. When an inquiry was made concerning children who had been named by their teachers as well adjusted the findings indicated that over a third of these might be regarded as maladjusted or disturbed youngsters on one count or another. The fact has been noted also by A. Harris (1952) that some children are considered normal by a teacher who presumably knows them pretty well and may be thought to be rather seriously disturbed when judged by clinical workers.

On the basis of interviews and tests, a school psychologist may discover two or three other youngsters who are able to "pass" on the usual screenings and tests but who are performing and achieving and living far below the level at which they might function. Further, among the children who seem to be making a good social adjustment, there may be one or two whose position in the group is held by domination or submissiveness or conformity of a sort that represents weakness rather than strength. The fact that teachers and clinical psychologists show disagreement as to whether or not children who seem to be well "adjusted" at school actually are in a fairly good state of mental health raises questions as to what we mean by mental health and how high a standard a child should

meet. But even with such a reservation the observations here reviewed are very challenging.

Studies by Ullmann (1952) and others have indicated that in some groups boys outnumber girls (approximately four to one) among children who are obviously "maladjusted" as shown by the usual signs, such as marked difficulty at school, difficulty in relations with people, tendency toward disruptiveness or other delinquent acts, tendency to give a large number of symptomatic answers on the usual type of personality tests. In Ullmann's study classmates also rated boys as more maladjusted than girls, so that, "regardless of the merit of the judgments, boys receive, in the combined criticisms of peers and teachers, a much greater volume of adverse appraisal than do girls." Ullmann cites studies of delinquency which also show upward to a ratio of four boys to one girl. Teachers also report, apart from general surveys, that boys usually far outnumber girls among the children with reading difficulties.

Even when a milder index of adjustment to school is employed it appears that boys are more openly resistant than girls. Tenenbaum (1940) found that more girls than boys said that they liked school when children were asked to respond anonymously in writing to the question, "Do you like school?" In response to this question, twenty-four per cent of the boys openly expressed dislike of school as compared with only ten per cent of the girls.

Why do boys so far outnumber girls in this kind of appraisal? There probably are many reasons. One reason may be that boys are more open in revealing their difficulties. They are more overtly aggressive and rebellious in a manner that would lead teachers to regard them as maladjusted. One view of this is that the kind of behavior teachers regard as desirable is more the kind of behavior one expects from a girl than the kind of behavior one associates characteristically with a boy. On the other hand, in the Ullmann study, teachers seemed to be just as confident in their judgments when they rated the boys as when they rated the girls. According to Ullmann, the answer probably is not that "desirable" behavior is more characteristic of girl behavior but that teachers rate girls more

favorably because they are not as aware of the manner in which girls are making their significant adjustments. In the case of girls, favorable ratings are sometimes given in the absence of evidence to the contrary. There is some reason to believe, in other words, that teachers do not notice what may be hidden behind a façade of politeness and obedience in girls.

An indication that girls are perhaps as troubled as boys is seen in the observation that at the adult level, according to Ullmann, women apply for psychological help at least as much as men do.

So the findings with regard to the number of boys as compared with the number of girls who seem to be troubled people do not show necessarily that boys are more troubled than girls (or less troubled).[5] What they do suggest is that if we could take account not only of the more obvious and aggressive manifestations of emotional difficulties but also of the hidden tensions connected with anxiety, hostility, bitterness toward self and others, we would probably find a considerably higher incidence of disturbed children than has usually been represented in statistics dealing with this matter.

This kind of inquiry can, of course, be carried to the point where it seems that everyone either is crazy or is soon to become so. It is possible to set up so exacting a standard of "adjustment" that everyone is maladjusted. As a matter of fact, everyone is probably "maladjusted" to some degree on one score or another. But this statistical fact, if it is a fact, is not in itself important. The important thing is to face as realistically as possible the conditions in the make-up of children, in their immediate environment, and in the culture in which they live which bring disturbances and distortions into the process of growth, whether the number of children who are deeply disturbed is twenty or thirty or eighty per hundred, and whether or not they are judged to be severely maladjusted. Further, it is important to keep in mind that each child in the process of finding himself has his own peculiar struggle whether or not he happens, statistically, to fall into the ranks of the obviously "maladjusted." It is also important to bear in mind that it is

[5] Some of the difficulties boys face because of inconsistent attitudes toward their conduct when they live up to a stereotype of masculinity are discussed on pages 263-266.

necessary to look as forthrightly as possible at the mental health of children.

In work with parents and teachers the writer has observed that such findings as the foregoing, which show how many children there are who have difficulties, are quite unwelcome and disturbing to some adults. Some parents and teachers react at once as though they were being blamed. Many teachers, when they are told of the incidence of "maladjustment" among their pupils, take it as a sign that they must immediately do something about it. Even if they do not feel that it is their fault that the children are badly off they seem to assume it is their fault if they do not quickly straighten everything out. This, of course, is a very unrealistic attitude.

Some adults, when they hear about the incidence of children's problems, seek to ward off the implications of what they hear by saying that it is not the children who are disturbed; the trouble is that education is too "soft" and that psychologists who speak of such things are "soft-headed." The solution, according to some adults, is to "crack down" on children who rebel and "cut up" rather than to coddle them. Actually, it is not surprising that adults should recoil when they get a glimpse of the burden of suffering borne by so many children. A reminder of such distress is bound to produce anxiety, for it will touch upon painful areas in the lives of adults. Many adults were once in the ranks of the troubled children, even though they try to conceal this fact from others and from themselves. Such a reminder is also disquieting if the adult suspects that perhaps one of his own children would have to answer if a roll call were taken of the troubled ones. It is disquieting also if an adult feels an uneasy sense of responsibility or an attitude of guilt about his own attitudes toward children, especially if these attitudes are rather unfriendly.

The most (and best) adults can do is to seek to face the facts as realistically as possible and then seek to try to grow in understanding of the role they might play in dealing with these facts. There is the further fact, of course, that parents and teachers are products of the same culture, and are subject to the same pressures and conflicts as are the children. They are born of the same flesh.

Their feet are made of the same clay. The problems their children face are the problems they face, and have faced.

Social Implications of Children's Psychological Disorders

The problems exhibited by children hold up a mirror to the kind of culture in which they live and the stresses involved in civilized living. When a large proportion of children (and adults) show symptoms of poor mental health the question arises as to whether the rigors of modern life are demanding too much of human nature. As against this, it might be argued that conflicts are necessary for growth and that insecurities are not only inescapable but valuable for the sake of human progress. This no doubt is partly true, but there still is much that might be done, in a constructive way, to deal with the inevitable stresses of life.

Much of the strain of child rearing would be relieved if adults could approach the child more consistently from a developmental point of view. It seems to be hard for grown-ups to realize the simple but inexorable fact that it takes time for a child to grow. It is hard for an adult also to accept the simple fact that children at all maturity levels differ in ability and in all aspects of their make-up, and nothing can be done to alter that fact no matter how vigorously parents and adults try to force children to conform to the norm or surpass it.

It would be helpful also if adults could learn not only to accept a child for what he is but also to respect him for what he is. Such respect means that adults try to realize that the concerns of a child are as important to him at his level as are the concerns of adults at their level. It means also recognition of the fact that the child is one who, in the main, is trying at all stages of his growth to do the best he can with what he has.

The more this concept takes hold the more likely it is that adults will feel free to allow constructive forces within the child himself to go to work. In earlier sections we have noted many such constructive forces. There resides in the child a powerful impulse

to grow. He strives to make use of his growing powers. He possesses a vast capacity for self-repair. During the course of development he himself revises many of his ways of behaving. All children who have "problems" possess this impulse to grow, and this impulse, and the potential of health behind it, is something far more important than the disorders that appear.

It would be easier for children to develop into happy people if they could be spared some of the extra burdens that fall upon them by reason of tensions and irrational pressures in the lives of their elders. But unless adults themselves can remove stresses from their own lives the only way to free children from adult tensions would be to transport them to another world. Simply to tell adults not to impose their emotional difficulties on their children can neither cure the parent nor spare the child. But in this matter there also are grounds for hope. Adults, too, retain a growth potential. As long as they live they have some ability to continue their own personal development, to learn and modify their behavior, and to draw on resources that may have lain dormant. The more an adult seeks to enjoy his relations with children and to further rather than to obstruct their growth, the more important it becomes for him to try to deal with emotional problems in his own life that impel him to use a child as a rod upon which to lean, a scapegoat for his anger or a protection against his fears. To help children in the process of finding themselves adults who have children in their care must also be involved in the process of finding themselves. This is an issue which faces every human being regardless of his age, or his heredity, or the circumstances of his physical and social environment, or the conditions in the culture in which he lives. No knowledge is more important for the living of a life than knowledge of self.

Knowledge of Self, Acceptance of Self, and Mental Health

A child with good mental health can draw freely upon his ability to do, to think, and to feel. He enjoys a kind of inner harmony in

the sense that there is a considerable degree of integration of his intellectual and emotional capacities. By contrast, there is a lack of such integration and a condition of impaired mental health when the growing child has false perceptions regarding himself and others, and is burdened by such conflicts and irrational tendencies as prevail when his ways of dealing with the problems of the present are confused by a carry-over of unresolved problems from the past. There is a lack of integration, and a condition of impaired health, when he struggles more or less blindly and when his ideas, attitudes, and actions are governed to a predominant degree by unrecognized or "unconscious" tendencies.

Throughout this book there has been an emphasis on self-understanding and self-acceptance as concepts that are important from the point of view of healthy growth and from the point of view of healthy relationships between the adult and the child. The position has been that it is essential to good mental health in childhood and youth that the growing child be given as full an opportunity as possible to develop his capacity for knowing himself, and that it is essential for him to develop realistic attitudes regarding himself.

In his own way, each child is deeply immersed in the psychological issues that are involved in self-understanding and self-acceptance. Each child in his own way is a psychologist. From early infancy, without being deliberate about it, he acquires ideas and attitudes about himself and others. These are interwoven with his way of life. They may be true or false, healthy or unhealthy. With many children their development is left largely to chance, and it is not necessary that this should be so.

The child's potentialities for developing realistic ideas and attitudes regarding himself are often neglected while other aspects of their training are being pushed. Great numbers of children are pressed into reading and arithmetic whether or not they are ready; they must hasten to learn about Mother Goose and the habits of beavers, the Gold Rush, the "Dark Ages," and the amendments to the Constitution; they memorize the dates of bygone wars and the names of distant stars. But human motives and the inner life

of man are largely ignored in the education they receive from nursery school through college. As expressed by one writer, in our educational system we have asked the child to learn about everything except the most important thing—himself (Freeman, 1953).[6]

As noted and implied in earlier chapters, the concept of self-knowledge denotes a kind of awareness which is imbedded (1) in the experiences through which a person perceives himself and the objective dimensions of his personality; (2) in the experiences that are involved in his conception of himself and his properties as a person—his conception of who and what he is; and (3) in the experiences that are involved in his attitudes regarding himself. The concept of self-understanding does not simply mean a kind of intellectual astuteness or a clever overview of self. The marks of understanding are genuineness as distinguished from pretence, realism as distinguished from illusion, truth as distinguished from falsehood, forthrightness as distinguished from deviousness. The opposite of self-understanding (if one must be found) does not consist in being stupid or ignorant but, rather, in being blind and self-deceiving.

Self-understanding is not simply a form of recognizing facts but a way of realizing the significance of facts. It has the meaning of *knowing* as in Socrates' "Know thyself"; it has the meaning of consciousness of one's own being, such as is implied in Macmurray's (1935) statement that "Until we know ourselves we cannot be ourselves."

In the sections that follow an effort is made to draw together and to supplement some of the points that have been made in earlier chapters on this theme and to look into some of the practical implications.

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[6] The claim that much of what goes on in the name of education encourages children to evade rather than to face the realities of life could be documented in considerable detail, but we shall not go into the matter exhaustively here. Just by way of illustration, however, we may note that the academic content in class work supposedly dealing with human issues and social problems often seems remote from issues children can appreciate in terms of their own experiences (see, for example, Jersild and Tasch, 1949). Again, it has been noted, for example, that one outstanding characteristic of readings prescribed for children is their unrealistic optimism (see Child, Potter, and Levine, 1946).

Self-Understanding and Self-Acceptance

A child whose personality development is proceeding in a healthy way has realistic attitudes of self-acceptance.

Among the marks of a self-accepting attitude in a child is that he is able to live fairly comfortably with his own emotions; he tends to be confident in his ability to cope with life; he is willing as he grows older to assume responsibility for himself; he regards himself as someone who is worthy even if he obviously is not perfect; he has a healthy regard for his own rights and stands up for them. As he moves toward adulthood he accepts the limitations of his nature without feeling abused or severely blaming himself or others for them to such an extent that he is barred from using such resources as he has. He is able to draw on his capacities for thinking, feeling, and entering into friendly relationships with others.

Self-acceptance and knowledge of self both involve a process of facing the facts and conditions of life, favorable as well as unfavorable, as candidly and fully as possible. In keeping with this (as has been implied in earlier sections) self-acceptance is something very different from smugness or self-righteousness.

It is necessary to stress the point that self-acceptance does not mean smug self-satisfaction because the question often comes up. There are some who look askance upon the concept of self-acceptance as though it were morally wrong for a child to like himself, or as though a self-accepting child might lose his enterprise and ambition and become resigned to faults and lacks which he actually might be able to overcome. Self-acceptance has no such connotation.

The self-accepting person accepts the challenge of his abilities, without having a compulsion to overrate them or to reach for the impossible. The self-accepting six-year-old, for example, makes the most of his qualities as a six-year-old and does not bemoan his age or bend all efforts toward acting like a nine-year-old. The more he can live *as is* the less he needs to behave *as if* (Wenkart, 1954).

Self-acceptance and understanding of self are closely associated: One is not possible without the other. To accept himself, the grow-

ing person must be aware of himself; to accept his limitations he must be able to recognize them. Self-acceptance, in other words, requires awareness and perception. But the child's ability to become aware of himself will be influenced by the way he feels about himself, and the way he feels about himself will depend, in part, on the way others feel about him and encourage him in the process of self-discovery. To discover his abilities and aptitudes and to recognize them in a forthright manner it is necessary for a child to have a chance, at home or at school or somewhere, to try himself out in situations which are not so rigged in advance that he will constantly feel that he is bad if he makes mistakes or regard himself as a failure if he does not equal or excel others.

According to the conception of self-acceptance a child is "successful" in his development if he is making effective use of his capacities whether he happens to be the brightest child in the community or one of the dullest, the handsomest or one of the ugliest, the tallest and best built or the puniest and most ungainly. By the same token there is defeat in the process of development if a child, whether he is talented or humbly endowed, draws only to a small extent upon his intellectual and emotional resources even though he is quite successful by external standards and seems to meet most of the common standards of "adjustment." [7]

Self-Acceptance, Self-Criticism, and Conformity

A child's ability as he grows older to accept and to benefit from criticism from others and now and then to make a critical appraisal of himself is an important feature of a self-accepting attitude. To develop this ability it is necessary for him to be with people, at home, or at school, or somewhere, who can help him to become

[7] Sören Kierkegaard emphasized the concept of self-realization in these terms: "As an heir, even though he were heir to the treasure of all the world, nevertheless does not possess his property before he has come of age, so even the richest personality is nothing before he has chosen himself, on the other hand even what one might call the poorest personality is everything when he has chosen himself; for the great thing is not to be this or that but to be oneself" (*Either/Or*, Vol. II; Princeton: Princeton University Press, 1949b, pp. 149-50, translated by Walter Lowrie).

aware of his faults and limitations without rejecting him. A person who is self-accepting does not relish criticism, but he does not hold himself above it. He is better able than the self-rejecting person to consider its worth, and act on it, rather than feel guilty or dismayed by it. A self-accepting child in the upper elementary grades will have some ability to consider whether or not his teacher's criticism of him is reasonable, and to profit from it. But a self-rejecting child is more likely to feel anxious and angry even when the teacher's criticism is quite reasonable.

Evidence bearing on the ability to accept criticism is offered by Taylor and Combs (1952) in a study of sixth-grade children who were divided into "better-adjusted" and "poorer-adjusted" groups on the basis of scores on a personality test. The children were given a list of twenty derogatory statements and were asked to check those that applied to them. The "better-adjusted" children accepted a larger number of derogatory statements as applying to them than did those rated as poorly adjusted. The greater a child's over-all confidence in himself is, the better he is able to afford, so to speak, to look squarely at the fact that he is imperfect in this or that particular.

The child who is self-accepting also has more freedom to cultivate his own interests without being a slave to every fad or expectation that confronts him. In very simple terms this means, for example, that on a cold day a child's first impulse will be to put on a warm coat as he sets out for school rather than to hesitate, or set out without a coat, because in his circle of boys it is regarded as "sissy" to be warmly dressed.

Self-Acceptance and Acceptance of Others

There is a relationship between a realistic view of self, acceptance of self, and accepting attitudes toward others. A study by Trent (1953), earlier referred to, illustrates this by showing that Negro children who tended to reject themselves most also tended to have rejecting attitudes toward other Negro children and toward whites, while the children who tended to have positive attitudes toward

themselves also tended to be friendly rather than hostile in their attitudes toward other Negroes and toward whites.[8]

The same emotional currents are involved in good will or in ill will toward others and toward oneself. Love of self and love of others go hand in hand. A child who hates others probably hates himself.

Understanding of Self and Understanding of Others

Another principle which has been emphasized is that understanding of self and understanding of others go together. Unless, for example, a person is aware of his emotional tendencies and has the ability to face at least to some extent the impact and meaning of his own emotions he will not be able to appreciate the meaning and significance of the emotional experiences of others.

That a person who is realistic in judging himself is likely also to be more, rather than less, realistic in his judgment of others has been noted in a study by Norman (1953) in which people rated themselves and were rated by others. Within the limits of his study Norman found a positive relationship between insight into self and realistic perception of others. In an earlier study by Sears (1936) it was found that persons who lacked insight into the extent to which they manifested an unfavorable trait (such as stinginess) tended to pass more extreme judgments on others with respect to this trait than did persons who showed insight into themselves.

Another finding has been that a person who possesses a trait generally regarded as desirable is likely to have better ability in judging this trait in himself and others than one who does not possess the trait, although his judgments will not necessarily always be correct.[9] Likewise, a person who lacks a quality generally regarded

[8] Earlier studies dealing with this relationship have been reported by Sheerer (1948), and Phillips (1951). Psychological principles underlying the relationship between attitudes toward self and others have been discussed by Fromm (1947) and Sullivan (1947). See also Kierkegaard, who maintained that in judging another person one reveals what one is oneself (Kierkegaard, 1949a, translated by Lowrie).

[9] See, e.g., Cogan, Conklin, and Hollingworth (1915). For a review of some of the other earlier studies in this area, see Shaw (1931).

as desirable may not be as realistic in judging himself or others with respect to this quality. Dudycha (1940) found, for example, that undependable students were more inclined than others to claim that they usually kept their promises and were dependable and punctual.

Another study suggests that students who are less intelligent and less well adjusted tend to make errors in estimating their abilities somewhat more than abler and more favorably adjusted students (Arsenian, 1942).

The concept that understanding of self and understanding of others are interrelated is another idea that often meets resistance. Many adults who deal with children, both parents and teachers, have been strongly indoctrinated in the idea that to deal with children one need only learn the "facts," find a method or prescription, and then *do* something by way of a kind of external manipulation. Some teachers show this habit of thought when they ask for methods of *teaching* self-understanding as though it could be achieved by a sort of mechanical operation or taught like formal spelling. Actually, there are many teaching methods that can be used to help children to discover and learn to know themselves, but the primary condition for using them is that the teacher himself must be involved in the process in a very personal way.

In Defense of Pride

In an earlier section dealing with "the paradox of the self" we noted that, although the child's developing selfhood is an ever-changing phenomenon, children (and adults) also tend to resist reminders that go counter to any false attitudes or ideas they already have formed concerning themselves. Such resistance appears repeatedly in the child's conduct at home and at school. One problem in facing it is that adults often take steps against the resistance as such (which actually is only a front that the child assumes), instead of biding their time to find out what lies back of it.

Resistance may take the form of not seeing and not hearing, or

avoiding contact with the people or situations that threaten to challenge a person's cherished illusions about himself.

Another method of resistance is to outshout the person who is giving a reminder of a feature in oneself one does not care to hear about. A more refined version of this is to ward off such a reminder by taking flight into talk or aimless discussion. A flight into logic by way of what seems to be an impersonal discussion of the *real* facts is a means sometimes used as defense against having to face the personal implications of an idea. This method is impressive when used by learned people, especially when they can draw on their scientific knowledge to support what they say. But flight into logic in order to side-step something that threatens to call for an examination of one's beliefs and biases can be used quite effectively by people who know very little grammar and don't pretend to know any science.

There are many devices a child can use to blunt or divert a distasteful reminder about something pertaining to himself: "You're another," "Who's talking?" "Of course *you* never forget what you promise to do," "Consider the source," and so on. At later levels, a person may avoid a certain teacher or course at school, or steer clear of an author, book, article, or newspaper which threatens to throw the spotlight on something in himself he does not wish to examine.[10]

Many of the methods a person can use in defending a vulnerable position with regard to himself have been referred to by Freud and his followers as defenses of the ego. Such defenses, when used by a child or an adult, not only have the effect of diverting the person from his real problem, but they also quite often divert others from the real problem.

One defense is to avoid responsibility by putting blame on someone else. For example, a youngster is having difficulty in his school subjects and has a grievance against his teacher and school. He is anxious, quick to take offense, and he suffers from an "emotional

[10] Traditionally, the most direct method people have used in resisting one who has expressed truths they did not like to hear has been to kill him. Socrates and Jesus were silenced in this way.

block" so his school work is not up to the level he is capable of. The teacher says he is restless and thinks he is spoiled. The child has winced at the teacher's sarcasm, and his pride has been badly hurt. He has good reasons for feeling bitter toward the school, but he seeks, along with this, to avoid the implications of his own failure. One way of doing this is by placing all the blame on the teacher.

In facing this kind of self-defense parents and teachers often fall into the error of arguing with the child on his own terms, as though an emotional problem can be disposed of by a closely reasoned argument much as one might use to solve a problem in logic.[11]

Another defense a child can use is to deny that there is any difficulty. The child in the example above denies that he actually is poor in his work; on a fair test he would really do all right.

Yet another defense is that of projecting or externalizing a problem. A child whose pride has been hurt feels hostile toward his playmates who shun him because, as they say, he is a poor loser, but in his version of the matter it is not he who is at fault; it is they who bear a grudge. Likewise, a pupil who smarts under criticism which hurts his pride attributes the criticism to the fact that others are hostile toward him, and thus he avoids facing the meaning of the criticism itself.

Another defense takes the form of leaning over backwards in deploring and repudiating a certain characteristic one has, as though one were disowning the weakness. Although the child is a fighter himself, he roundly deplores fighting. Similarly, a person who is a bully may sound off against bullying. A person who wishes to ward off uneasiness about the fact that he never gives a treat to others says harsh things about stinginess. The child who has a strong impulse to scold and find fault may develop a campaign against the kind of people who have the characteristic of finding fault with others.

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[11] One means of defending their own pride which adults often use is to treat an emotional problem of their own or of their children or pupils as though it were an intellectual problem, thereby freeing themselves from facing the implications of their own emotional involvement. In scholarly circles, one way of thrusting aside an unpalatable idea is to call it unscholarly.

The youngster may also seek to divert his attention from facing himself by seeming to admire the very qualities he does not possess or does not wish to assess in himself. The youngster who himself is rather spineless may make a hero of those who have spunk, as though his identification with such people cancelled any need for facing the fact that he lacks spunk.

In defense of his pride a child may not only show a tendency to deplore a weakness that happens to be one he has himself, as though thereby disclaiming responsibility for it, but also make an effort to demonstrate just the opposite kind of behavior (although this appears more in an older person than in a child). The child who is inclined to cheat in class may put on a great show of honesty, and the youngster who mentally grabs for the biggest piece of pie may, in actuality, take the smallest piece.

Another defense is to try to remove from awareness the meaning of conditions that threaten to undermine a much-desired view of oneself by ignoring some signs and seizing upon others. An example of this is a child who is disliked by other children but who magnifies any little sign that he is accepted and banishes from his thoughts all indications that he is not. A child who is rejected in the sense that his mother has little affection for him and has never wanted him may succeed in not noticing this fact even as he grows older and is able to understand what is going on. He is uneasy and uncertain due to his mother's lack of genuine feeling for him, but he succeeds in not catching the idea. It sometimes comes as a startling experience to a person after he has reached adulthood, and has somehow gotten more courage in his view of things, to discover, as he sees it, that his parents were so anxious and preoccupied that they never really were able to care much about him.

Another defense is to provoke someone else into "justifying" an attitude one already holds. For example, a child who is hostile and who would like to injure someone may annoy the other person just enough to arouse his anger and then use this display of anger by another as an excuse for hurting or belittling him. It is likely that many instances of aggressiveness, restlessness, and misbehavior, such as are represented in the "problems" shown in Table XXXIII, fall

in this category. When a child who has an imaginary grievance thus manoeuvers another into punishing him, he now, as he sees it, has a real grievance.

Yet another defense is to try to escape from the implications of an unpleasant reminder of weakness in one area by building up extra strength or competence in another area. A child who is not getting the kind of recognition he desires in the classroom because his schoolwork is not good may be extra zealous, even to the point of recklessness, in trying to win attention and distinction on the playground.

In addition to these methods, there are several more generalized kinds of approach which a troubled child might use in evading a forthright view of himself. A child who is self-effacing, who "gives in" rather than standing up for himself may try to put a different face on it. His compliance (so he figures) is not a kind of weakness but a kind of strength: He is charitable and strong enough to turn the other cheek and to overlook the way others are imposing on him. If he is suspicious (as others see it) he may, in his own estimate, see himself as a shrewd and cagey person but not as a person who is suspicious. Again, his competitiveness, springing from a need to be superior to others in order to bolster an otherwise weak conviction of his own worth, may to him be a mark of healthy ambition and enterprise.[12]

The Value of Silence

When a defensive reaction such as any of those noted above comes up for discussion, parents, teachers, and other adults often ask: "So what should we do about it?" Actually, the best thing at the moment usually is to do and say nothing unless the adult "sees through" the child's resistance and feels ready on the spur of the moment to do something that might help to deal with the real problem. If a child's pride has been pricked by a criticism and he

[12] Horney (1950) gives many illustrations of the way in which people by a process of rationalization convert such weaknesses as these into an appearance of strength.

becomes sullen, or shows a temper, or violently defends himself as though he felt abused, it will not pay for the parent or teacher to argue how reasonable the criticism was or to rebuke the child for being angry. If a teacher is puzzled by the fact that the child seems to overreact to mild criticism it is better for the teacher to bide his time and seek, as the days and weeks go by, to understand what is troubling the child. It is better, too, for the adult (if he can achieve so great a degree of objectivity) to examine his own impulse to argue with the child or to rebuke him, for this impulse probably means that the child has threatened his pride and he is inclined to meet the child's resistance with a nice bit of resistance of his own. Because of their eagerness to defend what may be quite an overdone picture of themselves as wise and reasonable people, adults often have a strong urge to meet a child's irrational defenses in kind. One of the hardest things to learn in dealing with troubled children is to keep one's mouth shut until one has something meaningful to say (and when one has found the meaningful response one often discovers it is best expressed by silence).

However, if the adult already has some understanding of the child and sees, let us say, that back of the youngster's intense emotional response to a mild bit of criticism there is a desperate need to protect himself from being put to shame, he might, by a word, a gesture, or smile, or by asking the child to do something he likes to do, communicate to the child that he did not intend to hurt him. The sympathy and understanding from which such an act springs are more important, however, than the act itself. More often, the "thing to do" involves an attitude and an effort which can only be communicated to the child over a period of weeks or months or even years.

Criteria of Self-Evaluation

Studies dealing with the kinds of thoughts and feelings children of various age levels have when they think about themselves are quite limited. Some findings from a study which deals with a restricted aspect of a young person's view of himself are reproduced

TABLE XXXIV

PERCENTAGE OF BOYS AND GIRLS IN A POPULATION OF 2,893 WHO MENTIONED ITEMS IN VARIOUS CATEGORIES OF SELF-DESCRIPTION IN REPORTING "WHAT I LIKE ABOUT MYSELF" [13]

		Elementary Grades						*Junior High School*						*High School*						*College*			
	Grade	IV		V		VI		VII		VIII		IX		X		XI		XII		Fresh. & Soph.		Jr. & Sr.	
	Sex	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*
	Number	220	206	147	142	171	172	96	77	134	151	170	204	151	157	112	124	137	122	50	50	50	50
Category																							
I	Physical Characteristics and Appearance	15	19	22	30	12	30	14	13	29	42	23	35	25	37	17	19	15	20	40	28	20	38
II	Clothing and Grooming	16	27	12	26	12	28	14	12	13	25	13	23	17	11	10	15	9	6	10	34	24	20
III	Health and Physical Soundness	6	2	8	8	7	5	8	0	8	5	4	3	5	5	8	2	4	2	4	0	6	0
IIIx	Bodily Pleasures	3	3	1	1	1	1	2	1	2	2	2	0	1	0	3	1	1	2	0	0	2	0
IV	Material Possessions	3	4	3	1	1	2	1	0	1	1	0	0	0	1	1	0	2	0	0	0	2	0
V	Animals and Pets	4	2	1	1	4	6	5	1	1	1	5	1	1	2	1	2	0	1	0	0	2	4
VI–VII	Home and Family	18	24	7	13	14	16	11	9	13	11	7	7	5	6	4	10	4	5	0	8	4	4
VIII	Recreation: Enjoyment of	15	10	7	4	18	10	13	5	15	5	7	3	8	5	8	6	4	3	0	2	6	6
IX	Ability in Sports, Play	13	9	20	6	24	9	13	4	16	7	10	5	17	5	11	6	8	2	28	2	8	8
X	School: Ability in School; Attitudes Toward, etc.	21	33	13	17	23	21	19	29	21	27	15	12	11	8	12	6	9	9	14	18	16	18
XI	Intellectual Abilities	5	3	6	6	8	3	4	4	7	7	8	6	6	11	14	9	12	9	26	22	34	36
XII	Special Talents (Music, Arts)	14	11	14	17	16	20	8	23	16	18	8	11	12	11	14	14	13	12	14	26	22	28
XIII	Just Me, Myself	11	6	7	5	15	9	9	8	14	13	11	10	21	27	19	9	17	11	24	16	12	8
XIIIx	Personality, Character, Inner Resources, Emotional Tendencies	23	19	20	13	24	28	37	35	35	36	29	39	36	38	31	30	35	45	78	72	78	94
XIV	Social Relationships and Attitudes	20	22	22	29	22	38	38	51	37	50	34	52	42	43	51	46	42	61	74	82	76	86
XV	Religion	4	2	1	0	4	2	0	1	1	5	1	1	1	3	2	2	1	4	4	2	0	2
XVI	Independence, Self-Help	5	2	3	2	1	2	2	0	4	2	6	1	5	0	8	7	6	2	6	8	12	2
XVIx	Privacy	1	0	3	1	1	2	1	0	1	0	2	0	0	0	2	1	1	1	6	2	0	4
XVII	Attitude Toward World	1	0	1	1	1	1	3	1	2	1	2	1	2	4	0	2	4	2	0	2	16	4
XVIII	No Response	2	4	4	3	4	4	6	3	1	3	7	6	5	10	5	12	16	3	0	2	0	0

[13] Reproduced, in abridged form, with permission, from *In Search of Self*, Bureau of Publications, Teachers College, Columbia University, 1952. Approximately forty subcategories in the original table are not reproduced.

in Table XXXIV which shows the kinds of responses young people give when asked to write compositions on the theme, "What I Like About Myself."

Such findings as those appearing in Table XXXIV touch only lightly on children's attitudes concerning themselves, yet they bring out some matters of considerable interest.

At all ages, for example, a large proportion of children, without any leading questions, evaluated themselves in terms of their own inner resources, their personality traits, and emotional tendencies.

Likewise, a large proportion of young people at all ages appraised themselves in terms of their attitudes toward others, their relationships with others, and attitudes of other people toward them. This is in keeping with the general principle that a person's view of himself is intricately interwoven with his view of others and his notions of how others view him.

The Language of the Self

According to the results in this study, the most prominent criteria which young people use in judging themselves at any level tend to stand out prominently at all levels. At all age levels there was emphasis on personality traits and on social relationships. The standards in terms of which young people judge themselves are not scaled according to age or developmental stages or in the manner of subjects taught at school.

The language a person uses to communicate his thoughts and feelings about himself has meaning over a wide age range. The "language of the self" seems to be more universal than the language used in many other kinds of description and communication. If, for example, we studied the emotion of fear from a biochemical point of view we would deal with scientific information that a high school or college student might understand, but it would not mean much to a fourth grader. But as we move toward the more intimate aspects of fear—fear as a personal experience—we speak of something that seems to have much the same meaning to the young person as to the older person. In the sphere of social relationships, similarly,

two people might be far apart in their understanding of social theories, but as we move nearer toward personal involvement in the social world we find that the simple question "Do they like me, or don't they?" (or "Do I get along with others, or don't I?") has meanings that are much the same at eight years as at forty.

Connected with this finding is the fact that when young people appraise themselves they emphasize emotional tendencies within themselves. Feelings involved in their attitudes are emphasized more, for example, than their intellectual abilities or the physical properties of their bodies (intellectual abilities received comparatively little mention except at the college level). When young people psychologize about themselves, as they do when they discuss what they like or dislike about themselves, the content has more reference to the emotional than to the intellectual.

There are indications in such findings, as indicated above, that a psychology concerned with self-understanding need not be scaled in the usual manner of science or mathematics. There is reason to believe that many of the psychological realities which affect human beings are rather simple and can be grasped at an early age. Affection knows no grade level. Fear is as much fear to the fourth grader as to the college student. The little child knows what it is to have his feelings hurt, to be disappointed, disapproved by others, disapproved by himself, in a way that has much the same personal meaning to him as to a college student. The child in early elementary grades knows love and hate, and he can effectively use the language of affection and rejection even though his vocabulary is not as large as the one used by an adult. The language of reason changes as people become more learned. Symbolic relationships become more intricate. But the language of basic human emotions does not seem to change much.

If this is true, then it is quite likely that people are able to communicate with each other on an emotional level even though they are quite different in intellectual ability. The "slow learner" probably knows anger and fear much the same as his peer with a high IQ, and he is as sensitive to the stark fact of being accepted or rejected or being reminded that he is a failure, or a worthy

person, even though he is not good at learning history or algebra. This raises again a recurrent theme connected with the concept of self-understanding and self-acceptance. There may be differences in the academic content (the particular words that are used or readings that might be assigned) when a teacher seeks to communicate with an older child, or a bright child, as compared with a young child or a child who is not so bright. But when a youngster has suffered from wounded pride, or is hostile, or is afraid, the symbols of communication are less important than the attitude they express and the degree of sympathetic understanding that lies back of them.

Table XXXV shows results that were obtained when young people from the fourth grade through college wrote compositions on the subject, "What I Dislike About Myself." Again it appears that certain categories of self-evaluation, notably those referring to personality, character, and emotional tendencies, and those pertaining to social attitudes and relationships with other people, are mentioned quite frequently at all levels. However, there are some differences when young people speak of what they like about themselves.

From 6 to 30 per cent of the young people deplored their tendency to become angry or to lose their temper as something they disliked about themselves (the subcategory covering this is not reproduced in Table XXXV). On the other hand, the percentage of young people in the various groups who spoke favorably of their ability to manage their anger ranged from zero to six. In similar manner, upwards of 18 per cent of the young people in some groups deplored their tendency to be afraid when they described their unfavorable characteristics, but no more than 3 per cent of the young people in any of the groups described their ability to cope with their fears as a favorable trait.

These findings are in keeping with what we noted in earlier chapters concerning the great effort that is made at home and at school to induce growing children to repudiate their emotions and to feel guilty about their anger and their fears.

There is, however, another finding which somewhat counterbalances this state of affairs: In describing what they like about

TABLE XXXV

PERCENTAGE OF BOYS AND GIRLS IN MAIN POPULATION OF 2,893 WHO MENTIONED ITEMS IN VARIOUS CATEGORIES IN REPORTING "WHAT I DISLIKE ABOUT MYSELF" [14]

		Elementary Grades						*Junior High School*						*High School*						*College*			
	Grade	IV		V		VI		VII		VIII		IX		X		XI		XII		Fresh. & Soph.		Jr. & Sr.	
	Sex	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*	*B*	*G*
	Number	220	206	147	142	171	172	96	77	134	151	170	204	151	157	112	124	137	122	50	50	50	50
Category																							
I	Physical Characteristics and Appearance	11	16	17	30	17	41	17	26	24	48	32	53	27	44	13	32	10	30	12	20	8	12
II	Clothing and Grooming	4	10	7	5	4	9	2	8	4	7	3	10	1	3	3	2	4	2	0	0	2	0
III	Health and Physical Soundness	2	3	3	4	5	2	4	1	4	1	6	2	3	3	0	6	1	2	6	2	0	2
IIIx	Bodily Pleasures	4	4	4	1	2	2	4	1	3	1	4	3	1	3	2	1	3	3	0	2	6	0
IV	Material Possessions	0	0	1	1	1	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0
V	Animals and Pets	2	1	0	1	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
VI–VII	Home and Family	17	19	9	22	11	21	8	10	7	14	11	11	7	8	4	15	6	6	6	6	2	6
VIII	Recreation: Enjoyment of	5	1	1	1	4	2	3	0	2	0	2	0	2	1	2	1	1	0	0	0	2	0
IX	Ability in Sports, Play	4	4	7	1	10	6	3	1	7	5	7	3	5	2	7	0	5	0	0	2	0	4
X	School: Ability in School; Attitudes Toward, etc.	22	22	18	23	32	27	31	27	26	34	36	24	25	17	27	15	15	23	36	10	14	16
XI	Intellectual Abilities	1	1	3	2	6	4	5	8	7	4	5	4	7	4	11	10	8	9	8	2	4	4
XII	Special Talents (Music, Arts)	9	10	5	4	9	15	4	10	7	11	2	6	5	7	5	10	5	6	12	8	6	8
XIII	Just Me, Myself	1	2	4	3	5	5	0	1	1	6	4	9	4	6	2	9	6	8	0	0	0	0
XIIIx	Personality, Character, Inner Resources, Emotional Tendencies	37	38	37	32	44	48	53	43	51	57	55	65	44	55	51	67	58	72	84	90	72	94
XIV	Social Relationships and Attitudes	16	14	15	18	15	20	13	22	22	28	16	26	25	25	18	30	24	25	52	58	50	48
XV	Religion	0	0	3	0	1	0	1	0	1	1	1	0	1	2	2	1	0	1	4	0	6	0
XVI	Independence, Self-Help	0	0	1	0	1	1	2	1	4	1	5	3	3	2	8	2	9	4	12	12	18	10
XVIx	Privacy	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
XVII	Attitude Toward World	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	1	1	0	0	0	2
XVIII	No Response	10	5	5	3	3	5	5	1	4	1	11	1	11	12	14	4	16	4	0	0	8	0

[14] Reproduced, in abridged form, with permission, from *In Search of Self*, Bureau of Publications, Teachers College, Columbia University, 1952.

themselves many youngsters mentioned their positive and friendly attitudes toward other people, and the number who spoke about such attitudes in a positive way was larger than the number who spoke of their unfriendly or hostile attitudes toward people.

The School in Relation to Self-Evaluation

School, experiences at school, attitudes toward school, and success or failure at school figure quite prominently in young people's appraisals of themselves. Roughly about one-fourth of the young people in the study under review made references to school. At practically all levels (except at college) experiences pertaining to life at school were mentioned more often as a source of self-disparagement than as a source of confidence and good feeling toward self. This suggests that in a great many instances the school does more to undermine than to encourage and support the average child's acceptance of himself.

It is quite arresting to observe that when children speak of school they speak more often in terms of self-disparagement than in terms of appreciation of themselves. Why should this be? The answer probably is that the school constantly and perpetually, day in and day out, year after year, reminds great numbers of children that they are not much good. To a large number of children who do not happen to have the kind of intellectual and conformist tendencies which are praised in most institutions of learning the school dispenses unfavorable comparison, reminders of failure, and implied rejection on a colossal scale.

The school cannot, of course, so arrange things that all children are always successful. To do this would be impossible and foolish. The work at school represents a very important aggregate of tests of ability which all children in a culture, such as ours, inescapably must face. School work cannot be so arranged that no child in the process of his schooling is reminded pretty definitely of his limitations as well as of his strengths. However, to provide a realistic challenge to children and a realistic test of their abilities something very different from the policy prevailing in many, if not most,

schools is needed. The present policy in most schools is to expose some children endlessly to situations in which the teacher and the school administration know in advance that they will fail. With knowledge aforethought, many schools are continuously and deliberately rubbing salt into the already wounded self-respect of pupils. This happens when reading, writing, spelling, arithmetic, and other assignments are suited to the abilities of the abler children while the less able members of the class have no experience other than failure month after month, and it is known in advance that they will fail.

What often happens is that when a person fails in a given test in life, such as an important assignment at school, it is difficult for him not to view this as a test of him as a person, a total test rather than just a measure of a limited facet of his worth. When a child is deficient in arithmetic or in reading he will have a tendency, at least for the moment, to feel that he is just plain deficient in everything.

In schools where it is the policy to prescribe that the same assignments and tests be given to all children, regardless of individual differences, with reminders to all who succeed and all who fail, it is very difficult, and nearly impossible, for a teacher to counterbalance this policy. Yet there are some teachers who succeed in communicating to their less able pupils that they are not as worthless as the tests seem to make them out to be.

One of the most difficult problems in school is to give children realistic reminders of their shortcomings without giving them the impression that they are objectionable in all respects, just because they are not flawless in some respects. Here is an aspect of the teacher's role where the issue of self-knowledge and self-acceptance comes into the picture. The more understanding there is between the teacher and the pupil, the more likely it is that both the teacher and the pupil can see any given circumstance (such as the fact that a particular child is not doing as well in arithmetic as most of the other pupils) in its proper perspective. The relationship between the pupil and teacher will determine to a large degree whether the

child will see his failure in arithmetic as another sign that the school and the teachers are against him or will be able to face his failure as an objective, although very distasteful, fact.

Some teachers are far more successful than others in taking a realistic attitude toward their students' shortcomings without undermining the morale and self-confidence of their students. Likewise, in the day-to-day dealings between people in everyday life it is apparent that some people are more able than others to be forthright, frank, and honest in expressing both praise and criticism without injuring others or giving the impression to the person who is criticized that he is bad in all respects because he is wanting in some respects. If we went into this, we probably would find that it is the person who is most forthright in viewing his own strengths and weaknesses who is better able to be realistic in the way in which he praises others or reminds them of their lacks.

Emotional Stress as a Sentinel in Personality Development

When something goes wrong in the sphere of physical health there usually is pain, which warns a person and puts him on the alert. In the sphere of personality development there also is a sentinel: painful emotion. Surges of anger, irritability, feelings of depression, uneasiness and apprehension, especially when occurring for no apparent good reason, give warning of a disturbed condition in a person's inner life, of "sickness or the self," or of threatened sickness.

But like some insidious bodily diseases, disorders in personality development are quite painless at the start, less painful at least than the pain the person seeks to avoid. It is less painful for the child, at the moment, to give in rather than to stand up to a cruel bully who is stronger than he. He will be angry, but he succeeds for the moment in swallowing his rage.

Similarly, when a child who has failed in an effort, or who feels friendless, seeks refuge in make-believe, the dreams are soothing

In his imagination he can find the pleasure which reality denies him, gain the glory which has passed him by, and take revenge upon those who have done him wrong.

Often the first step into an irrational way of coping with emotional problems leads to next steps, then to further steps, and then to an elaborate process of scheming, imagining, and rationalizing. This happens, for example, if the child with a real grievance puts on a show of "taking it" but still harbors this grievance and lets time and experience and his own weakness add to it. His grievance which was a defense against unkind people or harsh circumstances may become embedded in a "logic-tight compartment," and he may unwittingly show his grievance by being suspicious in an undiscriminating way in his attitude toward people who are friendly or unfriendly. If he now "justifies" his ill-will toward people by way of a cynical view of life, or is unaware of the fact that he is undiscriminating in his suspiciousness he is, in effect, deceiving himself. Thus he suffers from a kind of dividedness within himself. He is then suffering from a psychological sickness, just as we would say that a person with a foreign body within his organism is suffering from physical sickness. He is suffering from what sometimes is called a "neurotic" solution to the problems of life.

If the pain involved in the first solution was, at the moment, as severe as the pain the child is bringing upon himself, or if a hand could smite a child when first he begins to be dishonest about his feelings, the first full step in self-deception might not be taken. But sometimes the hardship a child seeks to side-step is intolerable at the moment, and he must use such a crutch as outward compliance if he is to survive at all.

Yet when a child continues to use irrational means of dealing with his troubles he runs into more trouble. For example, if the child has "solved" the problem presented by overdemanding adults by being compliant, resigning his own rights, and pretending to live up to this role of self-effacement, his "solution" is likely to give him trouble, for as long as a spark of life remains he will resist so passive a role and he will now and then have a savage impulse to assert himself and to "be himself." But when such an impulse con-

flicts with the "solution" he has hit upon, he will need to go to additional lengths to "solve" this conflict by explaining it away. Such a conflict is disturbing and is anxiety producing. So the "sentinel" is at work: The child shows such symptoms as a tendency to be touchy and edgy, to get angry, cry easily, have many fears, avoid people, fail in school work he actually has the ability to do, or to "take out" his annoyance on innocent people.

These signs give warning of a deeper, underlying difficulty. Unfortunately, it often happens that the parents and teachers of children who thus give signals of distress are preoccupied with troubles of their own, and so they try to belittle or explain away the fears and tantrums and flights into fantasy which announce the child's need for psychological help. Many of these same adults promptly send the child to a doctor if he has a physical pain, but they shrink from seeking help in meeting psychological pain. The sentinel of the body is heeded, but the sentinel of the self frequently is not. Many who think it quite all right to ask a doctor to cure a pain in the stomach after they have swallowed too much food cannot bear the thought of seeking help for the psychological pain that comes from trying to swallow too much rage or fear.

The fact that in the community at large there often is such a strong resistance to the idea that mental health deserves attention quite as much as physical health places a heavy load both on the children who are troubled and on those adults who strive to help them.

In one community known to the writer, for example, the school board recommended hundreds of thousands of dollars for new buildings and yet struck out of the budget an item for a few thousand dollars covering the salary of a psychologist who had demonstrated an exceptional talent for helping children to come to grips with their problems. They did not budget a penny or encourage any provisions that might help classroom teachers to develop competence in dealing with these children. One result of attitudes of this sort is that in many schools teachers must enter into their search for understanding of children and of themselves as though it were a luxury or an extra task rather than an essential

feature of their professional work and a crucial feature of their own personal development.

The Place of Expression, Acceptance, and Examination of Feeling in Personality Development

To realize the value which signs of emotional distress can serve in revealing the child's struggles and needs, as noted above, it is necessary for parents and teachers to look upon emotion not as something to be concealed but something that should, as far as is prudent and feasible, be given opportunity to be revealed. Only through such a policy is it possible to understand the child and to help him to understand and accept himself in a realistic way.

Fortunately, many children have freedom to express at least some of their feelings at home (although even among the children who "emote" freely at home by way of anger there are some who shrink from showing fear, or who never betray how lonely they are). In many schools however (it probably is correct to say in most), the traditions, customs, and expectations go against a policy of free examination of feeling. There are, of course, many practical reasons why children cannot be encouraged to express feeling as freely and openly at school as at home. But schools have gone beyond this practical limitation when they emphasize intellectual development and the outward forms of social conformity to such an extent that there is little emphasis on emotional development. Yet even to help children to achieve their fullest intellectual development (if not for other and far more compelling reasons), it is necessary to give attention to emotion.[15] Even in connection with the relatively small amount of attention some schools do give to human psychology, the emphasis often is on adjustment through a process of control, negation, conformity, and living according to rules rather than an emphasis on self-fulfillment.[16]

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[15] Recent writings have emphasized more and more, for example, that academic disabilities often, if not always, are closely tied to emotional difficulties. See Ephron (1953).

[16] In an examination of textbooks on psychology for high-school students, undertaken in connection with a work conference on the teaching of psychology in

It has been observed that when schools have the courage to allow students to express and examine their feelings there will be occasions when children bring their feelings sharply into view, even in dealing with seemingly harmless subjects, such as in reporting on current events. Whatever the occasion, a display of feeling may help the pupil to get a clearer perception of the nature and quality of his feelings, and he may eventually get a clearer grasp of the motives underlying them.[17]

One such episode, observed by the writer, occurred when a pupil in a current-events period told about a proposal in New York City to legalize gambling. A girl in the group, with flashing eyes and a high pitched voice, let go with a tirade against gamblers. Her feelings about gamblers were so bitter that they seemed to the teacher to represent an intense state of hostility that was tied in one way or another to her own personal life. The teacher, who had an uncommon capacity for accommodating such expressions of feeling, did not argue or cross-question, and the members of the class, who had caught some of the teacher's spirit, did not make the girl feel embarrassed for showing her feelings so openly. As the school year progressed, one quite noticeable change in the behavior of this girl was that she was able to assert her opinions without acting as though she had to fight against others or as though she had to be on guard against an attack from others. She was even able quietly to bring out some of her pet antipathies and discuss them with the teacher. She seemed to have gained in ability to deal with her hostility in a more constructive way.

Whereas an emotional outburst *as such* probably has little or no value for a child, something significant can take place when feelings are shown or "released" in an atmosphere where learning is encouraged. A feeling that previously may have been vague in the child's experience has come to the surface, has shown itself with

high schools, it was noted that many of these texts do not emphasize self-realization but place their main stress on the concept of "control" of emotion and encourage students to conform to standards set by others, rather than to develop their capacity to acquire convictions and commitments of their own. (See Jersild and Helfant, 1953).

[17] In other publications, the writer has discussed this problem from the teacher's point of view (1951, 1952).

some clarity as anger, say, and has been focused on an object or target (such as gamblers in the illustration, who were not the primary targets). When a child in such a situation flares with anger against a teacher or a classmate he may be expressing anger which has been aroused in relationships with his mother or an older brother, but even if anger is displaced it may be better for it to come out against the wrong person under circumstances we are here trying to describe than not to come out at all. A child might discover, for example, that it is anger which lies back of much of his uneasiness at school where he is made to work, and this anger is much the same as what he feels when he is on guard against anyone who tries to coerce him at home.

But more might happen. When a child has a chance to express his feelings he not only may be able to get a clearer view of them, but he also may make the discovery (surprising to some children) that he can have pretty intense feelings and express feelings without necessarily making enemies, or without having to crawl into a hole to hide his humiliation. It comes as quite a revelation to some children when they find that someone will still like them even though they have ranted and raved. So an expression of feeling that is not followed by punishment or belittlement may help a child to discover that his feelings are not in themselves bad. Again, for a child to discover that he can express anger without arousing anger, or that he can express an ordinary criticism without having it regarded as a hostile kind of attack, may give the youngster a different view of the meaning of his own anger. If, for example, he expects an angry response when he expresses anger, and is all set to parry it, and then no anger is directed toward him, he is like a person who has filled his pockets with stones to defend himself from attack and then finds that he really did not need a weapon. If this happens often enough or strikingly enough, he may begin to examine the attitudes of suspiciousness which led him to fill his pockets with stones.[18]

[18] Although the classroom teacher who has been trained in the usual fashion is not, and should not, pretend to be a psychotherapist, the fact is that the classroom situation and the relationship that exists, or might exist, between a teacher and her pupils offer an almost unlimited opportunity for exploring the

One of the burdens borne by an emotionally disturbed child is that he often views others with distrust and suspicion that keep him out of touch with them, and thus he adds to his own trouble. Such distrust may have arisen in relationships with people who actually were cruel and against whom he actually did have to protect himself. But in schools which aim to help children to develop emotionally, an able teacher can now and then create a situation in which children who are deeply distrustful but still within reach of help can venture to express themselves, to trust others a bit, to try out their almost forgotten capacity for entering into a friendly and confiding relationship with others. Sometimes a little play acting, an impromptu debate, a chance to work on a committee (or to be chairman in a discussion), or a "gripe session" can precipitate meaningful emotional interchange.

An important consequence of freedom to express feeling may be that the child is freed from some of the burden of secrecy. In connection with emotions that trouble children there often is an element of isolation and loneliness. A child is afraid of corpses, for example, or is troubled by the idea that he might come home late at night in the dark and find the house locked or empty, or he does not dare to go to the attic for fear of a huge rat there, and so on. Children harbor many such fears, within the privacy of their own world, as a kind of guilty secret. But now when they tell of such fears they have, in a sense, not only confessed but thrown themselves on the mercy of others, and when their confession does not bring shame and ridicule upon them, they can relax a bit, and perhaps not feel so strong a need to hide within themselves. Moreover, by revealing something about themselves they

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meanings, and seeking the goals, and testing the practical meaning of attitudes that are implicit in the underlying philosophy and the psychological concepts involved in psychotherapy as set forth, for example, in the following: in Axline's position with regard to play therapy (1947); in Sullivan's position with regard to interpersonal relationships (1947); in procedures in group therapy as described, for example, by Slavson (1943, 1947), and by Hinckley and Hermann (1951); and in therapeutic relationships as described by Rogers (1942b, 1951), and Allen (1942). Snygg and Combs (1949) have discussed some of the implications of the concept of the self in relation to the goals of education and the task of the teacher.

may encourage others to reveal something about themselves, and they all may soon discover that they are not alone in their troubles: They are not queer, for others have exactly the same troubles, or worse ones.

When a child discovers that he is not alone in having troublesome emotions and is not as "queer" as he thought, this too can help him to see himself in a more realistic light. This does not mean that fears and anxieties are banished simply by discovering that others also are anxious and afraid. Far from it. But when a frightened child feels free to express his fright and is struck by the fact that others also are afraid, at least a small dent has been made in the vicious chain of events of fear and blame through which a child becomes alienated from others and from himself.

The same line of thought applies also to hostility and the consequences of hostility. It is in an interpersonal setting that most of the resentments a child harbors arose, and if he can bring them out into an interpersonal setting there is more of a chance for them to be resolved.

To have access to his feelings it is necessary for a child to experience the actual feelings rather than just talk about them. To talk about joy, fear, or hate in intellectual terms is similar to talking about a steak instead of tasting and chewing it. This fact stands out when one observes that children often feel guilty (as adults often do, too) even though they have, as we say, openly confessed and made a clean breast of some transgression or other. The confession, which represents what they can grasp intellectually and express verbally, may not represent the real psychological issue or the real emotional content. So a child may continue to feel badly, even though he has been assured that God has forgiven him and that no human being will hold his faults against him. Jimmy confesses, for example, that he stole a dime from Johnny's desk, and then Johnny forgives him, and his teacher and parents and pastor forgive him, but he still feels guilty. He feels guilty because the act of confession and the gift of forgiveness did not touch upon his real problem. He stole, it is true, but his real trouble is not that he is a thief. He stole, let us say, because he feels envious of

Johnny who always has spending money—but it was theft, not envy, that he confessed, and by being absolved of theft he did not become free of envy.

Or he stole the dime, let us say, to buy candy to give to a big boy next door in order to bribe this big boy into liking him; so he stole because he was lonely, not because he was a thief. But after the theft has been forgotten and forgiven he may still be as lonely as ever.

Perhaps he stole to buy candy for another boy who might tell on him because Jimmy has been involved in sex play with him. In that event it was a sexual episode that made him so frightened he became involved in theft.

After the theft had been forgiven by others Jimmy might be no nearer than before in solving his fear or his loneliness or his conflicts regarding sex, and so he may be as much in need as he was before to steal or to do some other wrong thing in dealing with the struggle within himself. But if a situation were provided in which an adult, for the time being at least, was not interested in getting Jimmy to inform against himself, or to promise to live a new life, or to put his trouble into one nice verbal package, but was interested in letting Jimmy reveal some of the drama of his feelings something very significant might take place. If the teacher let Jimmy ramble on aimlessly in talking about himself, or allowed him to react and express his feelings (or remain silent) now in one context, now in another, it is likely that the teacher would get glimpses now and then of what really was troubling Jimmy. And Jimmy might himself begin to let drop little hints of his fear, his loneliness, his guilt relating to sex, and out of this and their common search both might come to a clearer grasp of some of the conditions underlying Jimmy's trouble. If a child can be encouraged to enter into situations in which he does not have to excuse his conduct to another, or to excuse it to himself, while still remaining free to give some expression to his anger or his fear or his loneliness or his guilt, there is at least a chance that he might get a view of conditions within himself.

There are ramifications in this that go far beyond the province of

this book, and so we leave the topic with only a few summary statements.

If a child is to grow in understanding of what is important in his life and in the life about him, he must be encouraged to make the most important discovery of all: himself. To discover himself and his resources and to grow in knowledge of himself, it is essential for him to have a chance to test the reaches and limits of his abilities and to draw upon his feelings and face their impact and meaning. To face his feelings, he needs freedom to experience them and he needs freedom to express them, if not to others, then at least to himself. He also needs opportunities through which he can come to understand any feelings of a defensive or hostile sort that may have arisen in his relations with others and himself.

Adults who would help the child to find himself must also seek to understand themselves.

The search for self-understanding is not something that can be undertaken and then completed. It is a never-ending process. As long as a person lives and as long as the people whom he deals with remain alive, much that is unknown lies about him and much that is as yet unreached, untried, and unexplored lies ahead. The search goes on and the challenge persists as long as there is life.

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INDEX

Abandonment, fear of, 356
Ability as related to interests, 500
Abstractions, development of capacity for dealing with, 443-444, 454-455
Abused, feeling of being, 93-94 (*See* Grievances)
Academic difficulty, bearing of emotion on, 614-615
Academic subjects, interest in, 508-510
Acceptance:
  by peers, 240-247 (*See* Friendship)
  in relation to discipline, 92
  need for, 257-260
Acquired aspects of personality, 578
Adopted children, implications of predicted intelligence of, 557-558 (*See* Foster Children)
Adjustment, 581 ff.
  as related to capacity for self-criticism, 586
  dubious judgments of, 586
Adult attitudes regarding children's quarrels, 210-211
Adult practices, effect of, 283
Adults as children's peers, 232-235
Affection, 306-316 (*See* Acceptance, Self-Acceptance, Friendship, Love)
  as source of parental joy, 337
  bearing of on development, 309-310
  expressions of, 306-307
  relation of to alienation from self, 314
Age similarities in self-evaluation, 605-606, 608
Aggression, displaced, 213
Aggressive behavior (*See* Anger, Fighting, Grievances, Hostility, Prejudice)
Aggressiveness:
  as an expression of anxiety, 584
Aggressiveness (*Cont.*):
  as judged by teachers and clinicians, 584
  as related to sympathy, 219
Alertness, early signs of, 421
Alienation from self:
  bearing of lack of affection on, 314
  in prejudice, 292
Altruism, 306
"Anal" personality, theory of, 140
"Anal phase," theory of, 138-139
Anatomical differences, effects of awareness of, 329
Anger:
  as a feature of jealousy, 394
  as key to self-discovery, 393
  as object of play, 317
  as sign of fear, 347
  at self, 392
  displacement of in prejudice, 290
  effects on performance in drawing, 390
  expression of in play, 503
  expression of in relation to self-discovery, 616
  general discussion of, 375-400
  incidence of in early memories, 431
  need for freedom to explore nature of, 614-618
  rationalizations of, 601
  resulting from thwarted imaginary activity, 487
  role of in self-evaluation, 607
  (*See* Hostility, Prejudice, Jealousy, Grievance, Aggressiveness)
Anthropological aspects of child care, 105
"Anticipation," as a feature of development, 45-46; 48

Anticipation of future, by way of make-believe, 484
Anxiety, 360-366
"age of," 342
as expressed through "problem" behavior in school, 584
concerning intelligence level of children, 558-559
definitions of, 361-362
in adults as aroused by reminders of children's problems, 589-590
in pregnancy, 12-13
in relation to compassion, 324
in relation to discipline, 89
of parents, in relation to anger, 380
theories of, 363-365
Archaic behavior trends, 44-45
Argumentativeness, 201
Arithmetic, role of maturation in readiness for, 37
Arms, development of use of, 152-153
Art, interest in, 508-510
Articulation of speech sounds, 406-407
Artistic skills, 162-163
Attention span, 433-436
bearing of on children's resistance, 204
Attitudes:
as feature of self-awareness, 606, 608
as feature of self-knowledge, 593
as related to popularity, 251
effect on recall, 472
influence of on children's perceptions, 472
in relations with parents, 310
in relation to self, 179
mention of in self-evaluation, 605, 608
of parents toward children, 338-340
of teachers toward children, 339-340
parental, as related to practices, 81-82
parental, as related to rivalry in children, 223
rationalization of, 598-602
toward boys as compared with girls, 263-265
toward physical and psychological helplessness, 70n
toward self and others, 297
with reference to elimination and genital organs, 137-138
(*See* Jealousy, Prejudice)
Authority, defiance of, as a form of anxiety, 584
Authority figure, hostility toward, 383-384
Autocratic practices, 285
Awareness of traits of others, 197

"Baby-party" technique, 191
Balance, development of, 155
Ball play, 37, 161, 506, 513
Behavior,
at birth, 52 ff.
organization of, 51-52
Beliefs, religious (*See* Religion)
Bible:
interests in, 536-537
quoted, 6, 86
Bilingual children, intelligence performance of, 563-564
Bilingualism, 417-420
Birth, psychological implications of, 7-9 (*see* Newborn Child)
Bladder control, 132-136
Block play, 162-163
Boredom, 319-321, 512-513
Bowel control, 135-136
Boy-girl relationships, 261-265, 508-509
Breast-feeding, 107 (*See* Sucking)
Bright children, studies of, 567-570
Brightness, as related to self-acceptance, 595
Bullying, 214-215, 600
Buttoning, 36

Cartoons, understanding of, 467-468
Cause and effect, understanding of, 451-454
Cephalocaudal direction of development, 48
Cerebral cortex, early functioning of, 54
Character (*See* Moral Development, Personality)
Cheating, 530-532
as a form of problem behavior, 583
attitudes toward, 271, 524-525
Chewing, 108-109
Child psychology, reasons for study of, 1-2, 4-6
Child-rearing practices, anthropological aspects of, 105

Climbing, developmental changes in, 37-38
Clothing and grooming, role of, in self-evaluation, 604, 608
Comics, 516
Communication:
  barriers to, 295
  early forms of, 403-404
  of prejudice, 294
Companionship, between adults and children, 232-235 (*See* Friendship)
Compassion: 28, 323-324
  as common feature in self-realization and religious approach to life, 541
Compensation, as forms of defense of pride, 602
Competition, 221-230 (*See* Jealousy)
  as disguised hostility, 387
  beginnings of, 223-224
Competitiveness, rationalization of, 602
Compliance:
  as expression of fear, 346
  rationalization of, 602
Compulsions, as related to self-acceptance, 594
Concentration, development of capacity for, 433-436
Concept of self, 593
Concepts:
  moral, 524-525
  of religion, 536
  of time, 37, 438-440, 468-469
Conceptual component of self, 179
Concrete, early interest in, 442-443
Conditioned response, in neonate, 74-77
Conflict:
  between what is professed and practiced, 541-542
  regarding sex, 334
  within moral training given to children, 528
Conflicts between children, 205-209 (*See* Fighting, Jealousy, Prejudice, Teasing)
Conformity, educational stress on, 614, 615n
Conscience, role of in anxiety, 366
Consistency (*See* Constancy)
Constancy:
  of intelligence quotient, 548 ff.
  of parental practices, 81-84
  of personality traits, 72-73
  of popularity ratings, 245-246
  of "problem" behavior, 250n
  of social status, factors associated with, 249-250
Constructive forces in child, 23-25, 590-591
Convictions:
  role of, as contrasted with conformity, 615n
  signs of discrepancies in, 542
Cooperation, 230-231
Correlation coefficient, illustration of, 546
Crawling, 149
Creeping, 149
Criticism, self-defense against, 599-600, 603
Cruelty, 228, 583
Crying:
  in neonate, 64-65
  suppression of, 304-305
Cultural environment, as related to intelligence, 563
Culture, reflection of values in, 534
Curiosity, 24, 444 (*See* Children's Questions)

Dark, fear of, 355-356
Daydreams, 488-490, 491-492 (*See* Make-Believe)
Death:
  children's questions concerning, 441
  fear of, 356-357
Deceit: 530-532
  pertaining to self, 593, 612
Defenses, of the ego, 598 ff.
Defiance, as expressed through sex behavior, 335
Delinquency:
  footnote reference to, 530
  sex ratios in, 587
Democratic practices, 82-84, 284-286
Dependability, judgment of in self and others, 598
Deprivation, effects of, 35-36, 560-561
Desires, expressions of in play, 503 (*See* Wishes)
Desire to "Belong," 257-261

Developmental revision of habits, 42-43
Differentiation of behavior, in neonate, 52 ff.
Dilemmas in development, 31-32
Discipline, 88-97
  bearing of on anger, 381
Discussion, nature of children's participation in, 446-447
Disobedience, as a form of problem behavior, 583, 584
Disparagement, as a factor in fear, 358
Dolls, 505
Domination, through sexual relationship, 335
"Dominative" behavior, 83, 208
Domineering children, experiment with, 212
Drawing:
  as a projective technique, 497
  developmental phases of, 164
  effects of anger on, nature of, 390
Dreaminess, as a form of problem behavior, 583
Dreams, 493-496
  emotional origins of, 496
Drives (*See* Motivation)
"Dull" children, 572 ff.

Early childhood, significance of, 4-7, 252
Early memories, 427-430
Eating (*See* Feeding)
Education:
  as distinguished from discipline, 96-97
  implications of, maladjustment for, 589
  (*See* School-Training)
Ego (*See* Pride, Self)
Egocentricity, in children's language, 414-415
"Electra complex," 145
Elimination, control of, 132-142
Emergency, relation of fear reaction to, 367
Emotion, 299-400
  as a sentinel in personality development, 611-613
  as basis for understanding others, 234
  as feature of self-awareness, 605-606, 608
Emotion (*Cont.*):
  at birth, 58-67
  bearing on moral conduct, 525
  communication of, through empathy, 87-88
  concealment of, 303-305
  expressions of in play activities, 503
  in children's make-believe, 478-482
  in infancy, 300
  in prejudice, 289 ff.
  in relation to knowledge of self, 234
  radio and television, treatment of, 515
  relation of to thinking, 471-474
  repudiation of, 607-608
  suppression of, 303-305
  (*See* Anger, Anxiety, Fear, Grief, Hostility, Pain)
Emotional, interrelation with intellectual, 309
Emotional development, 299-400
  impact of physical intimacy on, 81-82
  of gifted children, 571
Emotional instability, incidence of, 585
Emotional intimacy, as related to sexual intimacy, 335
Emotional maladjustment, as related to shifts in IQ, 552
Emotional maturity, as evidenced through compassion, 323
Emotional resources, use of as feature of self-acceptance, 595 ff.
Emotional tendencies, mention of in self-evaluation, 604
Empathy, Sullivan's theory of, 87-88
Environment:
  and personality development, 578 ff.
  demands of, in relation to need for discipline, 89-90
  influence of on intelligence, 554 ff.
  of newborn, 9-14
Erection, 328, 333
Eroticism:
  anal, 139
  oral, 105-107
Ethics, as related to parental self-evaluation, 340 (*See* Morals)
Evaluation, of children by children (*See* Popularity Acceptance)
Everyday care of children, 79-146
Example:
  effect of in overcoming fear, 369

Example (*Cont.*):
influence of on fear, 359
influence of on moral development, 528
Expectations, role of in anger, 382
Expression of feeling, as related to self-discovery, 614-618
Externalization, as defense of pride, 600

Failure:
as a policy of the school, 609-610
as form of rejection, 248-249
as outcome of competition, 226-227
Family relationships, mention of in self-evaluation, 604, 608 (*See* Parent-Child)
Family resemblance, in honesty, 531
Family size and intelligence, 566
Fancy, as a factor in reading interests, 519
Fantasies, 488-490 (*See* Make-Believe)
Father figure, hostility toward, 384-385
Fatherhood, psychology of, 10, 145
Fear, 341 ff.
age changes in expression of, 346-347
as factor in children's questions, 440-441
as feature in play, 317
as feature of self-awareness, 605
early signs of, 342-343
incidence of in early memories, 431
need for freedom to explore nature of, 614-618
of strangers, 188-189
prevention of, 373
record of in history, 512
relation of skills to, 280
suppression of, 303
underlying aggressive behavior, 584
underlying competitiveness, 229
values of, 366-367
(*See* Emotion, Terror Dreams)
Fears:
age trends in, 349-350
expression of in play, 503
guilt relating to, 617
lack of self-inquiry into, 474
Feeble-mindedness, 572
Feeding, psychological aspects of, 100-124
Feeding schedule, according to self-demand, 75
Feeding schedules, experiments with, 75-78
Feeling:
free access to as feature of self-acceptance, 594 ff.
moral attitudes toward, 616
place of acceptance of in personality development, 614-617
role of in anxiety, 361
(*See* Emotion)
Fighting, 205-209
Finger prehension, 152-154
Food-getting (*See* Feeding)
Food intake, 123
Food preferences, 120
Foster children, intelligence of, 555-556
Freedom:
as issue in upbringing of boys, 264
need for in process of self-discovery, 620
use of, in relation to discipline, 89
Friendliness:
potentiality for, 231
show of as a concealment of anger, 388
Friendships, children's, 236-240
Freudian theory, 59, 105-106, 145, 328-329, 576
Frustration, 380-381
effects of on performance, 390
inevitability of, 26-28

Games preferences, 504-505 (*See* Play)
Generalized movement, 52
Generalizing, capacity for, 449-450
Generosity, 532-533
Genitals (*See* Sex, Sexual Development)
Gifted children, 567-570
Golden rule, psychological bases of, 306
Grasp reflex, 54-55
Gratification, postponement of, 525
Grief, as a feature of jealousy, 395
Grievance, 612
in relation to discipline, 93-94
parental, against child, 99
self-justification of, 602
Group activities:
at preschool level, 192-193

Group activities (*Cont.*):
later trends, 193-194
Group therapy, 617n
Growth:
dimensions of, 30-31
nature and cause of, 22-46
philosophy of, 22-34
potential for, 590-591
role of in readiness for learning, 33-44
Guilt:
as aroused by weaknesses of others, 618
as form of fear, 346
as related to sex, 336
in dreams, 496
induced by reminders of children's problems, 589
parental feelings of, 340
realistic and irrational forms of, 521-522
widespread incidence of, 521-522

Habits, 76-77
developmental revision of, 42-44
routine, 79-146 (*See* Eating, Bladder Control, Sleep, etc.)
Handedness:
development of, 170-175
effects of, 175
theories of, 172-173
Hands, development of use of, 152-154
"Happiest day of my life," 318-319
Hate, of self, as related to hate of others, 597
Hearing, in neonate, 56-57
Heredity, 2-3, 30-31
bearing of on intelligence, 554 ff.
in relation to personality development, 576 ff.
Heroes, children's, 533-534
Heterosexual activity, judgments of teachers and clinicians regarding, 583
History:
interest in, 517
psychological implications in, 512
Honesty, studies of, 530-532
Hopi Indians, 36
Hopping, development of, 156

Hostility:
as expressed by competitiveness, 226, 229
as expressed through malicious humor, 327
as expressed through sexual attitudes and practices, 335
common experience of, 607
defenses against, 600
disguised, 214-215
displaced, 213
in relation to compassion, 324
outcroppings of in adults, 94
role of in anxiety, 363
self-justification of, 601
teacher's reactions to, 615
theory of association of with sexual behavior, 329
value of facing nature of, 618
(*See* Anger, Aggressiveness, Grievance, Jealousy, Prejudice)
Humor, 325-328
Hunger:
cycles, 76-77
in neonate, 61-62

"I," use of, 412-413
Ideas:
of right and wrong, 524-527
pertaining to religion, 535-536
(*See* Understanding, growth of)
Ideals:
children's, 533-534
conflicting, 530
Identification, with opposite character, as form of defense of pride, 601
Ignoring, as a form of ego-defense, 602
Imaginary companions, 489-492
Imagination:
bearing of on development of self, 185
development of, 478-499
play of in fear, 350, 357
Imaginative activities, 478-499 (*See* Play)
Imitation, as feature of make-believe, 479
Impulse, role of in anxiety, 361
Inconsistency:
in moral upbringing of children, 528
in religious upbringing of children, 541-542

Independence:
mention of in self-evaluation, 604
striving for, 23 (*See* Resistance)
Individuality, early signs of, 72-73
Individuation, 51-52
Infancy, 52-78, 80-146
anger manifestations in, 377
early evidences of imagination in, 478-479
fear manifestations in, 342-343
language development in, 401-402
mental development during, 421-425
sexual manifestations in, 328-329
Infantile behavior:
as an expression of anger, 390
as an expression of jealousy, 395
Infantile sexuality, 328
Infants, tests designed for, 545
Information, developmental changes in, 458-464
Insecurity:
as expressed by competitiveness, 229
characteristics of, 352
Integration, of intellectual and emotional as feature of mental health, 592
"Integrative" behavior, 83, 208
Integrity:
as a mark of self-realization, 523
as price of social acceptance, 251
as related to religious orientation, 541-542
lack of, as related to sex conflicts, 336
Intellectual achievement, as measure of human worth, 248-249
Intellectual activity, influence of emotion on, 471-477 (*See* Attitudes)
Intellectual awareness, as a feature of self-knowledge, 593
Intellectual development, 422 ff.
bearing of emotion on, 614
role of in children's fears, 343
role of in perception of humor, 326
Intellectual growth, limits of, 552-553
Intellectual qualities, as features of self-evaluation, 604, 606, 608
Intellectual teamwork, development of, 448
Intellectualization, as a defense against facing emotion, 600n
Intelligence, 543-574
and language development, 417
and social acceptance, 247
and tendency to cheat, 530
as factor influencing selection of companions, 239
bearing of early affection on, 309
constancy in rate of growth of, 548 ff.
definitions of, 543-544
in neonate, 75
in relation to bilingualism, 419-420
Intelligence Quotient, 545
Interests, 500-520
as distinguished from needs, 593n
as revealed by children's ideals, 534
in adulthood as related to childhood, 166-167
in parts of the Bible, 536-537
sexual, 330-333
(*See* Questions, Make-Believe, Play)
Interpersonal, as related to intropsychic, 363-365
Interpersonal relationships:
and anger reactions, 392
as aid to self-discovery, 282-283
as factor in development of self, 28, 80-81, 177-186
role of in origin ot anxiety, 365-366
Interrelations, in motor development, 164
Irrational conduct, 45 (*See* Rationalization, Prejudice, Anxiety)
Irrational fears, 360 ff.
Irrational pressures, 51

Jaw malformation, 103n
Jealousy, 394-400
as a factor in children's fights and quarrels, 207
Jokes, 326-327
Joy, as related to parenthood, 337 (*See* Pleasure)
Judgment:
moral, 525-527
of others as related to self-judgment, 597
Jumping, 155, 156

Knowledge (*See* Information)
Knowledge of self, as related to knowledge ot others, 591 ff.

"Know thyself," 593
Kuhlmann-Stanford Revision of Binet Scale, 560

Language:
as expression of aggression, 209
as revealed by children's questions, 436-437
development of, 400-421
effect of deprivation on, 560
effect of maturation on, 36
of the self, 605-607
Laughter, 325-328
Leadership, 254-256
Learning:
aspects of in infancy and early childhood, 79-146
as related to language development, 415
as related to process of self-discovery, 614-619
continued potential for, 591
desire for as a preventive of cheating, 532
deterioration in during state of anger, 390
effect of interests on, 502
in fetus, 50
influence of on children's interests, 518
in neonate, 73-78
in relation to anger, 376
in relation to handedness, 175
in relation to overcoming fear, 367-369
of social techniques, 211-212
role and conditions of, 41
role of emotion in, 614
role of in children's fears, 345-346
role of in development, 33-44
(*See* Memory)
Likes and dislikes, in everyday activities, 507-509
Locomotion, 148-151
Locomotor reflexes, 55
Logic, capacity for use of, 451-454
Logic-tight compartment, 612
Loneliness, 619
as a factor in fear, 356-357
Loquacity, 409-410
Lovability, as a personality trait, 578
Love:
of self as related to love of others, 306, 596-597
parallels of in religion and self-realization, 541
(*See* Affection)
Lying, 530 ff

Make-believe: 478 ff.
as outlet for jealousy, 395
functions of, 480-481
Maladjustment, studies of incidence of, 586-589 (*see* Problems of Adjustment, Anxiety)
Masculinity, stereotypes of, 263-265
Masturbation, 333
Maturation:
and bladder control, 132-135
and the process of social development, 198-199
in relation to capacity to learn, 33-44
of locomotor abilities (*See* Motor Development)
role of as compared with learning, 33-41
role of in children's fears, 343-345
role of in language development, 36
significance of for school, 41
Maturity, meaning of, 33 (*See* Emotional Maturity)
Memory, development of, 426-433
Mental ability, in relation to motor, 165-166
Mental age, 544
Mental deficiency, 572
Mental development: 422 ff.
as revealed by tests in infancy, 422-423
Mental growth (*See* Intelligence; Understanding, growth of; Concepts)
Mental health:
nature of, 591-592
studies of, 585-587
Mental orientation, as revealed by language, 412-414
Mental tests, 544-546
Minority, prejudice toward, 296-297
Minority groups (*See* Prejudice)
Misbehavior, as expression of anger, 387

Misconceptions:
examples of, 456-458
regarding religious concepts, 536
Mistakes, parental attitudes toward, 340
Moral aspect of self-acceptance, 594
Moral assumptions, underlying child psychology, 522-523
Moral concepts, as related to socio-economic status, 271-272
Moral development, 520-541
Moral implications, of human development, 523
Moral surrender, as related to competition, 227
Moral values:
as represented by radio and television programs, 515
as symbolized by heroes and ideals, 534
Morale, educational, decline with age in, 511
Moro reflex, 54
Mother figure, symbols of, 385
Motherhood, psychological aspects of, 11-14 (*See* Psychology of pregnancy, Attitudes, Parent-Child Relations)
"Mothering," 63
Mother love, 307
Motivation:
as a feature of development, 24-28
as related to cheating, 532
of children's fighting, 213
of competition, 225-226
of sympathetic behavior, 218-219
role of in emotion, 300-302
underlying development, 22-25
various forms of in sexual behavior, 334-337
(*See* Attitudes)
Motives:
neglect of in school program, 592-593
relation of to learning, 512
underlying children's conflicts with one another, 206
underlying resistance, 204 ff.
Motor ability: 164-165
bearing of on moral conduct, 524
relation to mental, 165-166
Motor development, 147-175
as manifested by self-help in eating, 117-120
as related to language development, 402
Mouthing, as form of exploration of environment, 107-108 (*See* Sucking)
Music, maturation of capacity for, 39

Naps, 128-129
"Natural" and acquired aspects of social behavior, 198-199
Needs (*See* Interests, Motivation)
Negativism (*See* Resistant Behavior)
Neonate, 1-2, 47-78
Neurotic solution, 612
Newborn child, 47-48
Newborn phase, characteristics of, 7
Norm, 31
Nursery school:
effect of varying practices in, 277-278
effect on intelligence, 278, 560-562
effects of on social development, 273-282

Objective as compared with subjective aspects of fear, 348-349
Obscenity, 583
Observation:
as a "participant", 18-20
as a spectator, 18-20
Occupational aspirations, 574
Oedipus situation, 145-146, 315-316
Omnipotence, theory of, as phase of early childhood, 383
Oral activities (*See* Sucking)
Oral drive, 103
Oral eroticism, theory of, 105-107
Orgasm, early evidences of, 329, 330
Orphanage children, studies of intelligence of, 559-560
Overprotection, parental, 311-313

Pain:
as a feature of "problem" behavior, 584
as an accompaniment of self-discovery, 24
associated with self-deception, 612
capacity for in neonate, 64

Pain (*Cont.*):
incidence of in early memories, 431
Painting, as a projective technique, 497
Paradox of the self, 598
Parental attitudes:
as reflected in child care practices, 80-84
as related to early memories, 432
effect of on prejudices, 294
toward newborn, 9-14
Parental overprotection, 311-313
Parental practices, as related to attitudes, 81-84
Parent-child, resemblances in intelligence, 554 ff.
Parent-child relationships:
as factor in anger, 379-380, 392
as factor in jealousy, 396-397
bearing of on anxiety, 363-365
bearing of on moral development, 524, 526-527
bearing of on overcoming of fear, 370, 372-373
bearing of on personality development, 579-580
bearing of on religious development, 535-536, 540
emotional aspects of, 337-339
(*See* Affection, Oedipus Situation)
Parents, attitudes of, compared with teachers', 339-340
"Participant observation," 18-21
Patterns of parental behavior, 82-84
Peers, role of in self-development, 231-232
Penis, manipulation of, 136
"Penis envy," 329
People:
attitudes toward, as revealed by expressed interests, 507-508, 511
awareness of, 446
Perception:
as a feature of self-knowledge, 593
blurring of in anxiety, 361
influence of feeling on, 472
in relation to self-picture, 185-186
of moods and emotions of others, 196-197
of symbols of social class, 272
role of in social relationships, 195-196
social, 188-189
Perception (*Cont.*):
subjective vs. objective aspects of, 15-18
Perceptual components of self, 179
Personal contacts, significance of, 62-63
Personality:
as revealed by popularity ratings, 244-247
consistency in development, 576-580
early evidences of distinctive features of, 72-73
early manifestations of, 576
effects of bilingualism on, 419-420
effects of religious training on, 539-541
factors in as related to sympathy, 219-220
general discussion of, 575-620
in relation to theory of "anal" drives, 139-141
of leaders, 254
of prematurely born children, 71-72
problems in development of, 581 ff.
stages in development of, 2-5
theory of development of in relation to "pregenital" phases, 106, 138-139
Personality development:
as related to motor development, 168-169
in relation to theory of "anal phase," 140-141
Personality disorder, anxiety as a form of, 361
Personality factors:
as related to early memories, 431-433
as related to honesty, 531
Personality problems, 581-590
Personality tests, uses of, 586
Personality traits:
associated with jealousy, 397-398
attitudes of parents and teachers toward, 338-340
mention of in self-evaluation, 604, 608
Philosophy of life, 179
Phobias, 362
Phrases, development of use of, 407

Physical care, psychological meaning of, 79-82
Physical characteristics, role of in self-evaluation, 604, 608
Physical contacts, significance of, 62-63
Physical growth, 147-148
Play, 501-507
  therapeutic implications of, 504
  (*See* Interests, Make-Believe)
Play therapy:
  footnote on, 617
  quotation on, 504
Pleasure, experiences of, 316-322
Politeness, as concealment of hostility, 387
Popularity, 244-247 (*See* Friendship, Acceptance)
Postural development, 148-150
Prayers, 130-131, 537-538
Prediction, of intelligence, 549 ff.
Pregnancy, psychology of, 11-14
Prehension, 152-155
Prejudice, 287-289
  moral implications of, 528
Premature child, 68-71
Prenatal activity, 47-52
Prenatal influences, 49-50
Prenatal learning, 50
Pride, 302, 607
  defenses of, 598-603
  in relation to compassion, 324
  sources of, for parents, 337
Problem behavior, 581-590
"Problem" child, need for understanding of, 257-258
Problem-solving, by make-believe, 481-482
Problems:
  in feeding, 121-124
  in relation to sleep, 127, 129-130
  of adjustment, incidence of, 585-587
Profanity, as a behavior problem, 583
Projection:
  of emotion in prejudice, 289 ff.
  of emotion on external conditions, 600
Projective methods, 496-499
Pronouns, use of, 412-413
Pronunciation, developmental changes, 13, 406-407
Property rights:
  as issue in children's conflicts, 206
  knowledge of, 212
Propinquity, as factor in friendships, 238-239
Proximo-distal direction of development, 48
"Psychological mother," 11
Psychotherapy, educational implications of, 614-620
Punishment:
  attitudes toward, 524-525
  effects of absence of, 616
  factor in arousal of fear, 352
  nature, management, and effects of, 97-98

Quarrels, 205-206
Questions, children's, 430-432

Radio interests, 513-515
Rage (*See* Anger)
Ratings, of pupil adjustment, 585-587
Rationalization, 44, 612
  of prejudice, 290-291
  (*See* Pride, defenses of)
Reaction-time, 159
Readiness, as related to learning of concepts in social studies, 469-470 (*See* Maturation)
Reading:
  beginnings of, 516
  interests in, 516-520
Realism:
  as a feature of self-knowledge, 593
  in judging others as compared with self, 598
Reality, evasion of, 593
Reasoning, 450-459
  by way of make-believe, 480-481, 483-484
Recall of early childhood experience, 427-433
Recklessness, as expression of anxiety, 584
"Reflected appraisals," 182
Reflex action, 53 ff.
Regression, 26
Rejected child, problems of, 313-314
Rejecting parent, plight of, 313
Rejection:
  as a school policy, 609-610

Rejection (*Cont.*):
as factor in fear, 356-358
emotional, 311-313
illustration of reaction to, 259
parental, 83
role of in anxiety, 363
(*See* Acceptance, Prejudice)
Religion:
and prejudice, 295
as feature of self-evaluation, 604-608
development of, 534-541
prevalence of, 534
Resistance:
as a form of defense of pride, 599
effect of on mental test score, 550
in relation to development of independence, 199-205
to authority figure, 383-384
Resistant behavior, in relation to social development, 199-205
Responsibility, capacity for, in relation to discipline, 90
Restlessness, as expression of anxiety, 584
Reversion, 26
Rhythm, 502
Rhythmical activity, maturation of capacity for, 39
Ridicule:
as expression of anger, 387
as method of dealing with fear, 368
Rituals, bed-going, 130-131
Rivalry, 222-223, 398 (*See* Competition, Jealousy)
Roller skating, 38-39
Rorschach Test, 498-499
Running, 157

Scapegoat, 389-390
School:
adjustment to, 583-586
interest in, 507-510
role of in self-evaluation, 604, 608-611
School subjects:
information regarding, 466
role of maturation in, 37
Schooling:
effect of on intelligence, 559-565
of backward children, 572-573
Schooling (*Cont.*):
response of gifted children to, 570-571
Science, children's interests in, 520
Secrecy, as factor in emotional stress, 616
Selective recall, of early experiences, 431-432
Self:
alienation within as related to anxiety, 363-366
anger directed against, 378
aspects of in early childhood, 4-6
attitudes toward as reflected in attitudes regarding sex, 333-334
attitudes toward as related to attitudes toward others, 297
attitudes toward as related to compassion, 323-324
attitudes toward, bearing of social relationships on, 252-253
attitudes toward, in relation to boredom, 321
attitudes toward, in relation to handedness, 172
awareness of, in relation to anger, 382-383
conception of, as factor in overcoming fear, 373
conception of, as related to social acceptance, 252-253
conception of, impact of motor development on, 147
conception of, in relation to motor performance, 168-169
defenses of, 184, 599 ff.
definition of, 179-180
demands on, in relation to anger, 381
emotional factors in development of, 360n
idealized version of, 364-365
knowledge of, in relation to study of early childhood, 4-6
knowledge of, in relation to understanding of childhood, 19-21
language of, 605-607, 608
nature of, 16-17
paradox of, 32
role of anxiety in relation to development of, 363
social origins of, 177 ff.

Self (*Cont.*):
"trueness to," 523
Self-acceptance: 184
as related to accepting attitudes toward others, 596 ff.
as related to self-knowledge, 594-595
nature of, 594 ff.
Self-approval in relation to approval from others, 183
Self-assertiveness, as expressed by resistant behavior, 200-202
Self-awareness, early signs of, 423-424
Self-belittlement, feelings of, 294
Self-concealment, in connection with fear, 346-347
Self-criticism, 595-596
as expression of guilt, 595
Self-deception, 593, 612
by way of hostility reactions, 388
through concealment of emotion, 303
Self-demand feeding schedules, 109-117
Self-discipline, 95
Self-discovery:
as a source of joy, 317-318
as related to child care, 84-86
bearing of, examination of anger on, 393
social factors in, 195
through examination of disciplinary techniques, 93
Self-disparagement, 608
as expressed through guilt regarding sex, 336
in relation to performance at school, 609
Self-effacement, in relation to anxiety, 363-364
Self-esteem, adult effect of children's resistance on, 201
Self-evaluation, 603-611
in terms of competitive standard, 226-229
Self-fulfillment, relation of to childbearing, 85
Self-help:
as affected by nursery school experience, 274
in eating, 117-120
Selfhood:
and society, 28-29, 177-186
Selfhood (*Cont.*):
beginnings of, 181
Self-identification, as an aid to learning, 512
Self-improvement, interest in, 508-510
Self-inquiry, evidences of lag in, 473-474
Selfishness, 306
Self-localization, in terms of physical features, 424
Self-love and love of others, 314
Self-observation:
through observation of others, 18-19
through study of child-care practices, 85-86
Self-pity, as a feature of jealousy, 395
Self-realization:
and religion, 540-541
bearing of interests on, 513
in relation to teaching, 85
moral implications of, 522-523
school's responsibility for, 614-617
Self-rejection:
as related to rejection of others, 596-597
as related to sex, 334
(*See* Self-Acceptance)
Self-revealment, through play, 503
Self-satisfaction, as distinguished from self-acceptance, 594
Self-selection of food, 113-117
Self-understanding:
as an essential for understanding others, 591 ff.
as related to IQ, 571
as related to self-acceptance, 592 ff.
as related to understanding others, 234-235
bearing of on mental health, 591 ff.
evidences of lack of, 474-477
nature of, 593-594
relation of dreams to, 496
role of emotion in, 606 ff.
school's neglect of, 477
with reference to early childhood, 429-430
(*See* Thinking, emotional factors in)
Sensitiveness, as a form of problem behavior, 583, 584
Sensory capacities of neonate, 55-58
Sentence usage, 407-408

"Separation anxiety," 190-191, 309
Sex:
as a factor in friendship selection, 239
as motivation in stealing, 619
behavior, as a form of domination, 335
children's questions concerning, 331-333
seriousness of as a "problem" in school, 583-584
(*See* Boy-Girl Relationships)
Sex differences:
awareness of anatomical aspects of, 144-145
in aggressive behavior, 210
in behavior problems, 581-587
in fights and quarrels, 213
in language development, 416-417
in moral expectations, 526
in self-evaluation, 604, 608
Sexual development:
early phases of, 142-146
emotional ramifications of, 328-337
Sexuality:
in relation to theory of anal eroticism, 138-139
in relation to theory of oral eroticism, 105-107
theory of "pregenital" aspects of, 105
Shame, 302
as outcome of prejudice, 294
as related to early memories, 432
in relation to elimination, 136-137
in relation to sex, 333-334
Shyness, 188-189, 344
as a form of problem behavior, 583-584
Siblings:
affection between, 308
rivalry between, 222-224
sympathy toward, 220
Silence:
psychological implications of, 235
values of, 602-603
Sisters (*See* Siblings)
Skill, as factor in dealing with fear, 370-371
Skills:
artistic, 162-163
as related to interests, 512
Skills (*Cont.*):
effects of on social behavior, 280-282
motor (*See* Motor Development)
Sleep, 124-130
Smell, sense of, in neonate, 57
Social adjustment:
effects of nursery school experience on, 277-280
limitations of concept of, 29-30, 257
unhealthy aspects of, 28-29
Social behavior, development of, 186-298
"Social class":
knowledge of symbols of, 272-273
(*See* Socioeconomic Status)
Social cohesion, bearing of sympathy on, 323
Social development:
of gifted children, 571
role of make-believe in, 485-487
"Social distance," 265
Social origins:
of selfhood, 28-29, 177-186
of the individual, 28-29
Social responses in infancy, 186-187
Social studies:
children's concepts pertaining to, 461-468, 470
relative unpopularity of, 512
role of maturation in learning of, 37
Sociality, 578
Socioeconomic status:
and incidence of children's conflicts, 210
and intelligence, 565-566
and language development, 415
and moral concepts, 524-525
and sexual behavior, 330
as factor in friendship selection, 239n
impact of on children's social development, 267-272
in relation to emotional tendencies, 297
in relation to motor achievement, 167-168
Sociogram, 243
Sociometric techniques, 240-247, 255-256
Socrates, reference to, 599
Solitude, fear of, 356
Space, concepts of, 463, 468

Special talent, as feature in self-evaluation, 604, 608
Speech (*See* Language)
Speech sounds, 402-403
Speed, 159-160
Sphincter control, 132-133
Spite, 392
Spontaneous behavior:
as contrasted with disciplined conduct, 90
as seen in revision of speech, 406
Spontaneous food demands, 109-117
Spontaneous use, as a feature of growth, 24-25
Sports, ability in, as feature of self-evaluation, 604, 608
Standards, underlying judgment of problem behavior, 582
Standing, development of, 149
Stanford-Binet Scale, 544-545, 551
Status, recognition of, 194 (*See* Desire to "Belong")
Stealing, 528, 583
devious motives in, 619
Stereotypes:
operation of in prejudice, 294-295
pertaining to foods and eating, 115, 123-124
regarding masculinity, 263-264
Stinginess, 597
Strangers, fear of, 354-355
Street play, 506
Strength, muscular, 159-160
Striving, as a feature of human existence, 22-25
Strivings, record of in human history, 512
Struggle:
as a feature of human existence, 25-28
as reflected by "problem" behavior, 584-585
Subjective and objective approaches, contrasted and compared, 14-16, 55-56, 58, 60, 228-229, 251, 260-261, 297, 576 (*See* Self)
Subjective aspects:
of personality, 576
religious experience, 539-540
Sucking, 53
behavioral aspects and psychological implications of, 101-108
Suffering, place of in human development, 25-28
Suppression of emotion, 303-305
Swallowing, 101
Sympathy, 216-220
emotional aspects of, 322-323
Synaesthesia, 492

Taste, sense of, in neonate, 57
Teacher:
reaction to as father- or mother-figure, 385
role of in children's self-discovery, 614-620
Teachers:
attitudes of, toward children, 339-340
compared with clinicians, 582-583
judgments of regarding problem behavior, 582-583
qualities of, 284
variations in practices of, 83-84, 279
Teasing, 206, 214-215
Television interests, 513-515
Temperature, sensory response to, 57-58
Terror dreams, 494-495
Therapy, implications of, for total school program, 614-620
Thinking:
emotional factors in, 471-477
free use of as feature of self-acceptance, 595
(*See* Early Memories, Concepts, Reasoning)
Thumb-finger opposition, 152-153
Thumb- (and finger-) sucking, 102 ff.
Thwarting, as factor in anger, 380-382
Time:
concepts of, 468-469
concepts of, role of maturation in development of, 37
Toys, interest in, 504
Training, moral, 523-527 (*See* Learning)
Traits, judgment of in self and others, 597 (*See* Personality)
Tricycling, development of ability in, 38-39
Truancy, as a behavior problem, 583-584
Tumescence, 136, 328

Twins, 555
intelligence of, 555
language development of, 416
personality development of, 577-578

Unconscious:
processes, as feature of anxiety, 366
processes, as feature of personality, 576
relation of to early memories, 428-429
tendencies, 592
Understanding:
growth of, 422-477
of connotations of words, 410-412
of religious concepts, 536
of self (*See* Self)
Unfinished story, as projective technique, 498-499
Unhappiness, incidence of, 585
Unhealthy aspects of competition, 226-230
Urination (*See* Bladder Control)

Value, theory of as pertaining to child psychology, 523
Values:
as revealed by choice of heroes, 533
implicit in child psychology, 523
in competition, 225-227
Vandalism, as expression of anger, 387
Vicarious dangers, 359
Vindictiveness, 392
as feature of jealousy, 395
(*See* Anger, Competition)
Vision, in neonate, 56
Vocabulary:
as feature of intelligence test, 544
early development of, 405
growth of, 409-410
Vocalization, 402-403
Vowel sounds, 403

Walking, 148-152, 155, 157
impact of on process of self-discovery, 151
maturation of ability in, 38-39
Weaning, psychological role of peers in, 231
Wechsler Intelligence Scale, 545
Wheel toys, use of, 157-158
Whole, priority of to part, 51-52
"Wholeheartedness," as a feature of development, 42
Wishes, 475 (*See* Make-Believe)
"Worst happenings," as compared with fears, 352-353
Wrist, development of use of, 152-153

"You," use of, 412-413

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